



## Online Planning Services

### Planning Application Details

Current applications will include an option to make a comment underneath the application details below.

To ensure that comments can be included in the officer's report for an application, they should be received by the council within 21 days of the Received as Valid Date (see below). All comments received before a decision is made will be taken into account, whether they are represented in the officer's report or not.

A signed copy of the Decision Notice, produced on Haringey Council letter headed paper can be obtained from the [Development Management Support Team](#)

Application details			
Reference number	HGY/2015/0774	Application Type	LISTED BUILDING CON
Site Location	<div>399-401 High Road</div> <div>London N17 6QN</div> <div><a href="#">View location on map (opens in new window)</a></div>	Proposed Development	Listed Building Consent for refurbishment of existing premises and roof extension and extension at rear to provide 17 flats.
Ward	Bruce Grove		
Received as Valid Date	20/03/2015	Consultation End Date	21/04/2015
Application Status	Refused	Decision Date	15/05/2015
Decision Level	Delegated	Temp. Permission Expiry Date	
Case officer	<a href="#">Robbie McNaugher</a>		
Applicant Name		Agent name	Mr David Alton

Applicant Address	High Road London N17 6QN	Agent Address	129 Halstead Essex C09 1HJ
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## Site Visit

Officer	RBM	Date	07/05/2015
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## Attachments

[Acoustic Report.pdf](#) -

[Application Form.pdf](#) -

[CGI Views A2.pdf](#) -

[Construction Management Plan.pdf](#) -

[Daylight Sunlight Overshadowing Report.pdf](#) -

[DESIGN AND ACCESS STATEMENT.Januaaur 2015.pdf](#) -

[Drawing Issue sheet.pdf](#) -

[Energy Demand Assessment.pdf](#) -

[Existing Basement Floor Plan A2.pdf](#) -

[Existing First Floor Demolition Plan A2.pdf](#) -

[Existing First Floor Plan A2.pdf](#) -

[Existing Ground Floor Demolition Plan A2.pdf](#) -

[Existing Ground Floor Plan A2.pdf](#) -

[Existing High Road Elevation A2.pdf](#) -

[Existing North Elevation A2.pdf](#) -

[Existing Roof Plan A2.pdf](#) -

[Existing Second Floor Plan A2.pdf](#) -

[Existing Sections A-A and B-B A2.pdf](#) -

[Existing Site Plan A2.pdf](#) -

[Existing South Elevation A2.pdf](#) -

[Existing West Elevation A2.pdf](#) -

[Flat 1 399 High Road L1A 2013 - Regulations Compliance Report.pdf](#) -

[Flat 1 399 High Road PEA\(5092611\).pdf](#) -

[Flat 2 399 High Road L1A 2013 - Regulations Compliance Report \(2\).pdf](#) -

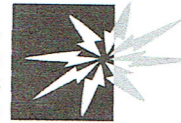
[Flat 2 399 High Road PEA\(5092620\).pdf](#) -

<a href="#">Flat 3 399 High Road L1A 2013 - Regulations Compliance Report.pdf -</a>
<a href="#">Flat 3 399 High Road PEA(5092624).pdf -</a>
<a href="#">Flat 4 399 High Road L1A 2013 - Regulations Compliance Report.pdf -</a>
<a href="#">Flat 4 399 High Road PEA(5092625).pdf -</a>
<a href="#">Flat 5 399 High Road L1A 2013 - Regulations Compliance Report (2).pdf -</a>
<a href="#">Flat 5 399 High Road PEA(5092629).pdf -</a>
<a href="#">Flat 6 399 High Road L1A 2013 - Regulations Compliance Report.pdf -</a>
<a href="#">Flat 6 399 High Road PEA(5092631).pdf -</a>
<a href="#">Flat 7 399 High Road L1A 2013 - Regulations Compliance Report.pdf -</a>
<a href="#">Flat 7 399 High Road PEA(5092636).pdf -</a>
<a href="#">Flat 8 399 High Road L1A 2013 - Regulations Compliance Report.pdf -</a>
<a href="#">Flat 8 399 High Road PEA(5092637).pdf -</a>
<a href="#">Flat 9 399 High Road L1A 2013 - Regulations Compliance Report.pdf -</a>
<a href="#">Flat 9 399 High Road PEA(5092642).pdf -</a>
<a href="#">Flat 10 399 High Road L1A 2013 - Regulations Compliance Report.pdf -</a>
<a href="#">Flat 10 399 High Road PEA(5092643).pdf -</a>
<a href="#">Flat 11 399 High Road L1A 2013 - Regulations Compliance Report.pdf -</a>
<a href="#">Flat 11 399 High Road PEA(5092647).pdf -</a>
<a href="#">Flat 12 399 High Road PEA(5092651).pdf -</a>
<a href="#">Flat 13 399 High Road L1A 2013 - Regulations Compliance Report.pdf -</a>
<a href="#">Flat 13 399 High Road PEA(5092657).pdf -</a>
<a href="#">Flat 14 399 High Road L1A 2013 - Regulations Compliance Report.pdf -</a>
<a href="#">Flat 14 399 High Road PEA(5092659).pdf -</a>
<a href="#">Flat 15 399 High Road L1A 2013 - Regulations Compliance Report.pdf -</a>
<a href="#">Flat 15 399 High Road PEA(5092665).pdf -</a>
<a href="#">Flat 16 399 High Road L1A 2013 - Regulations Compliance Report.pdf -</a>
<a href="#">Flat 16 399 High Road PEA(5092668).pdf -</a>
<a href="#">Flat 17 399 High Road L1A 2013 - Regulations Compliance Report.pdf -</a>
<a href="#">Flat 17 399 High Road PEA(5092671).pdf -</a>
<a href="#">Flood Risk Assessment Report.pdf -</a>
<a href="#">Heritage Significance.pdf -</a>
<a href="#">Lifetime Homes Statement.pdf -</a>
<a href="#">Location Plan A2.pdf -</a>
<a href="#">Planning Statement Document.pdf -</a>
<a href="#">Proposed Basement Floor Plan A2.pdf -</a>

<a href="#">Proposed First Floor Plan A2.pdf -</a>
<a href="#">Proposed Ground Floor Plan A2.pdf -</a>
<a href="#">Proposed High Road Elevation A2.pdf -</a>
<a href="#">Proposed North Elevation A2.pdf -</a>
<a href="#">Proposed Roof Plan A2.pdf -</a>
<a href="#">Proposed Second Floor Plan A2.pdf -</a>
<a href="#">Proposed Section A2.pdf -</a>
<a href="#">Proposed Section B-B A2.pdf -</a>
<a href="#">Proposed Site Plan A2.pdf -</a>
<a href="#">Proposed South Elevation A2.pdf -</a>
<a href="#">Proposed Street Elevation A2.pdf -</a>
<a href="#">Proposed Third Floor Plan A2.pdf -</a>
<a href="#">Proposed West Elevation A2.pdf -</a>
<a href="#">Secure by Design Document.pdf -</a>
<a href="#">Statement of Community Involvement.pdf -</a>
<a href="#">Tottenham High Road Area Weighted Calcs.pdf -</a>
<a href="#">Transport Report.pdf -</a>
<a href="#">Unit Area Analysis.pdf -</a>
<a href="#">Viability report.pdf -</a>
<a href="#">validation consultation list.pdf -</a>
<a href="#">comments from Historic England.pdf - Comments from Historic England</a>
<a href="#">comments from Historic England 2.pdf - comments from Historic England 2</a>
<a href="#">Comments from Historic England 3.pdf - Comments from Historic England 3</a>
<a href="#">Comments from Historic England 4.pdf - Comments from Historic England 4</a>
<a href="#">Consultation comments 001.pdf - Support from 46 Redston Road</a>
<a href="#">Comments From Conservation.pdf - conservation comments</a>
<a href="#">Officer Report.pdf -</a>
<a href="#">Decision Notice.pdf -</a>







Application for listed building consent for alterations, extension or demolition of a listed building.  
Planning (Listed Buildings and Conservation Areas) Act 1990

You can complete and submit this form electronically via the Planning Portal by visiting [www.planningportal.gov.uk/apply](http://www.planningportal.gov.uk/apply)

**Publication of applications on planning authority websites**

Please note that the information provided on this application form and in supporting documents may be published on the Authority's website. If you require any further clarification, please contact the Authority's planning department.

Please complete using block capitals and black ink.

It is important that you read the accompanying guidance notes as incorrect completion will delay the processing of your application.

**1. Applicant Name and Address**

Title:  First name:

Last name:

Company (optional):

Unit:  House number:  House suffix:

House name:

Address 1:

Address 2:

Address 3:

Town:

County:

Country:

Postcode:

**2. Agent Name and Address**

Title:  First name:

Last name:

Company (optional):

Unit:  House number:  House suffix:

House name:

Address 1:

Address 2:

Address 3:

Town:

County:

Country:

Postcode:

**3. Description of Proposed Work**

Please describe the proposals to alter, extend or demolish the listed building(s):

REFURBISHMENT OF EXISTING BUILDING, INCLUDING WINDOW PROPORTIONS AND PENETRATION TO MATCH ORIGINAL RESTORE REMAINING WEST WING OF ORIGINAL LISTED BUILDING ATTACHED TO REBUILT MAIN BUILDING. SIDE AND REAR EXTENSION TO PROVIDE 17 FLATS AS ENABLING WORK.

### 3. Description of Proposed Work (continued)

Has the work already started without consent?

☐ Yes ☒ No

If Yes, please state when the work was started (DD/MM/YYYY):

(date must be pre-application submission)

Has the work been completed without consent?

☐ Yes ☒ No

If Yes, please state the date when the work was completed (DD/MM/YYYY):

(date must be pre-application submission)

### 4. Site Address Details

Please provide the full postal address of the application site.

Unit:  House number: **399** House suffix:

House name:

Address 1: **HIGH ROAD**

Address 2: **TOTTENHAM**

Address 3:

Town: **LONDON**

County:

Postcode (optional): **N17 6QN**

Description of location or a grid reference.  
(must be completed if postcode is not known):

Easting:  Northing:

Description:

### 5. Related Proposals

Are there any current applications, previous proposals or demolitions for the site?

☐ Yes ☒ No

If Yes please describe and include the planning application reference number(s), if known:

Description	Reference number
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>

### 6. Pre-application Advice

Has assistance or prior advice been sought from the local authority about this application?

☒ Yes ☐ No

If Yes, please complete the following information about the advice you were given. (This will help the authority to deal with this application more efficiently).

Please tick if the full contact details are not known, and then complete as much as possible: ☐

Officer name:

**ROBBIE McNAUGHTON**

Reference:

**PRE/2014/0045**

Date (DD/MM/YYYY):

(must be pre-application submission)

Details of pre-application advice received?

### 7. Neighbour and Community Consultation

Have you consulted your neighbours or the local community about the proposal?

☒ Yes ☐ No

If Yes, please provide details:

### 8. Authority Employee / Member

With respect to the Authority, I am:

- (a) a member of staff  
(b) an elected member  
(c) related to a member of staff  
(d) related to an elected member

Do any of these statements apply to you?

☐ Yes ☒ No

If Yes, please provide details of the name, relationship and role



## 9. Materials

Please provide a description of existing and proposed materials and finishes to be used in the building (demolition excluded):

	Existing (where applicable)	Proposed	Not applicable	Don't Know
External walls	BRICKWORK	BRICKWORK TO MATCH	<input type="checkbox"/>	<input type="checkbox"/>
Roof covering	ROOFING FELT	ZINC ROOFING	<input type="checkbox"/>	<input type="checkbox"/>
Chimney			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Windows	PAINTED TIMBER	PAINTED TIMBER	<input type="checkbox"/>	<input type="checkbox"/>
External doors	PAINTED TIMBER	PAINTED TIMBER	<input type="checkbox"/>	<input type="checkbox"/>
Ceilings			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Internal walls			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Floors			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Internal doors			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rainwater goods			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Boundary treatments (e.g. fences, walls)		AS EXISTING	<input type="checkbox"/>	<input type="checkbox"/>
Vehicle access and hard standing			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Lighting			<input checked="" type="checkbox"/>	<input type="checkbox"/>
Others (add description)			<input checked="" type="checkbox"/>	<input type="checkbox"/>

Are you supplying additional information on submitted drawings or plans?

☒ Yes

☐ No

If Yes, please state plan(s)/drawing(s) references:

SEE ATTACHED DRAWING ISSUE SHEET  
HERITAGE STATEMENT  
ACCESS AND DESIGN STATEMENT.

Noise impact assessment  
of a proposed  
development at 399  
Tottenham High Road,  
London

I F Sharps MIOA

MSc (Hons) BEng (Hons)

Acoustic consultant

Sharps Acoustics LLP

7<sup>th</sup> January 2015

## Table of contents

1.0	Introduction.....	1
2.0	Assessment methodology and criteria .....	2
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## Appendices

Appendix A Existing layout

Appendix B Layout of proposed development

## **1.0 Introduction**

- 1.1 Sharps Acoustics LLP ("SAL") has been commissioned by Alto Property Investments Ltd to undertake a noise assessment of a proposed development at 399 Tottenham High Road, London.
- 1.2 The existing site currently contains a community facility on the ground floor, called "Chances", Chances hosts community activities such as workshops and music events. The existing site layout can be seen at Appendix A.
- 1.3 It is proposed to redevelop the existing property. The redeveloped property would incorporate residential flats and offices. The proposal includes the construction of a basement to be used as a venue for community workshops and music events. This would mean that there would be no longer a need to hold amplified music events on the ground floor of the existing building.
- 1.4 The proposed layouts of each floor can be seen at Appendix B. it can be seen that:
- The basement floor comprises an area for community activities such as workshops and music events, various miscellaneous rooms and two flats (1 and 2) separated from the workshops and music events area by stairwells and/or corridors.
  - The ground floor comprises a bar area and four flats (3 to 6) separated from this area by stairwells and/or corridors.
  - The first floor comprises an office area above the bar area with three further flats (7 to 9).
  - The second floor comprises an office area above the first floor office area with four further flats (10 to 13).
  - The third floor comprises of five flats (14 to 18).
- 1.5 The layouts have been designed sympathetically from the acoustic point of view in that the noisiest activity has been placed in the basement, ground floor bar areas have been separated from residential areas by corridors and/or stairwells. However, the interaction of potentially noisy and quiet areas is a concern and hence the need for careful acoustic design.
- 1.6 There are three main requirements to SAL's assessment 1) provide general advice on the necessary performance and construction of partition walls and floors between different rooms; 2) provide advice on the potential impact of noise from the bar area (no amplified music) and the basement area (amplified music) to the residential development; 3) provide

advice on the potential impact of noise from the bar area (no amplified music) and the basement area (amplified music) to properties close to the site.

1.7 The available guidance on assessment methods and criteria has been discussed at Section 2.0 below. This section considers the provisions of guidance and standards relative to internal noise levels in sensitive rooms.

1.8 The assessment findings and recommendations are provided in Section 3.0.

## 2.0 Assessment methodology and criteria

### British Standard 8233:2014

2.1 BS 8233:1999 has now been revised and released as BS8233:2014.

2.2 This standard provides guidance for the control of noise in and around buildings. It is applicable to the design of new buildings, or refurbished buildings undergoing a change of use, but does not provide guidance on assessing the effects of changes in the external noise levels to occupants of an existing building.

2.3 The BS8233:1999 standard was based closely on a 1995 draft of WHO Guidelines for Community Noise, 1999, at least in so far as the design noise limits suggested within BS 8233 are similar to the guideline values within the 1999 WHO Guidelines. There were only minor alterations between the draft and final version of the WHO Guidelines. The BS8233:2014 standard follows a similar approach as its predecessor.

### Internal sound insulation

2.4 The sound insulation properties of a partition or wall between rooms depends on several factors including the noise level and activity within the “source” room, the sensitivity of the “receiver” room, and the privacy requirement. Using these three variables, a matrix may be used to determine the sound insulation requirement of the separating partitions. An example matrix, which can be adapted according to the specific building use, is provided in the table below. Each room may be either a source or a receiving room. Where adjacent rooms have different uses, the worst case sound insulation should be specified.

2.5 The table below gives examples of on-site sound insulation matrix (dB  $D_{nT,W}$ )

Privacy requirement	Activity noise of source room	Noise sensitivity of receiving rooms		
		Low sensitivity	Medium sensitivity	Sensitive
Confidential	Very high	47	52	57 <sup>A)</sup>
	High	47	47	52
	Typical	47	47	47
	Low	42	42	47
Moderate	Very high	47	52	57 <sup>A)</sup>

	High Typical Low	37 37 No rating	42 37 No rating	47 42 37
Not private	Very high High Typical Low	47 37 No rating No rating	52 42 37 No rating	57 <sup>A)</sup> 47 42 37

*NOTE Background noise can also influence privacy.*

A) DnT,w 55 dB or greater is difficult to obtain on site and site layouts that result in a requirement for these insulation levels should be avoided wherever practical.

### Internal ambient noise levels for dwellings

- 2.6 In general, for steady external noise sources, it is desirable that the internal ambient noise level does not exceed the guideline values in the table below.

Activity	Location	07:00 to 23:00	23:00 to 07:00
Resting	Living room	35 dB $L_{Aeq,16hour}$	-
Dining	Dining room/area	40 dB $L_{Aeq,16hour}$	-
Sleeping (Daytime resting)	Bedroom	35 dB $L_{Aeq,16hour}$	30 dB $L_{Aeq,8hour}$

*NOTE 1 Table 4 provides recommended levels for overall noise in the design of a building. These are the sum total of structure-borne and airborne noise sources. Groundborne noise is assessed separately and is not included as part of these targets, as human response to groundborne noise varies with many factors such as level, character, timing, occupant expectation and sensitivity.*

*NOTE 2 The levels shown in Table 4 are based on the existing guidelines issued by the WHO and assume normal diurnal fluctuations in external noise. In cases where local conditions do not follow a typical diurnal pattern, for example on a road serving a port with high levels of traffic at certain times of the night, an appropriate alternative period, e.g. 1 hour, may be used, but the level should be selected to ensure consistency with the levels recommended in Table 4.*

*NOTE 3 These levels are based on annual average data and do not have to be achieved in all circumstances. For example, it is normal to exclude occasional events, such as fireworks night or New Year's Eve.*

*NOTE 4 Regular individual noise events (for example, scheduled aircraft or passing trains) can cause sleep disturbance. A guideline value may be set in terms of SEL or  $L_{Amax,F}$ , depending on the character and number of events per night. Sporadic noise events could require separate values.*



## **Design criteria for external noise**

- 2.7 For traditional external areas that are used for amenity space, such as gardens and patios, it is desirable that the external noise level does not exceed 50 dB LAeq,T, with an upper guideline value of 55 dB LAeq,T which would be acceptable in noisier environments. However, it is also recognized that these guideline values are not achievable in all circumstances where development might be desirable. In higher noise areas, such as city centres or urban areas adjoining the strategic transport network, a compromise between elevated noise levels and other factors, such as the convenience of living in these locations or making efficient use of land resources to ensure development needs can be met, might be warranted. In such a situation, development should be designed to achieve the lowest practicable levels in these external amenity spaces, but should not be prohibited.
- 2.8 Other locations, such as balconies, roof gardens and terraces, are also important in residential buildings where normal external amenity space might be limited or not available, i.e. in flats, apartment blocks, etc. In these locations, specification of noise limits is not necessarily appropriate. Small balconies may be included for uses such as drying washing or growing pot plants, and noise limits should not be necessary for these uses. However, the general guidance on noise in amenity space is still appropriate for larger balconies, roof gardens and terraces, which might be intended to be used for relaxation. In high-noise areas, consideration should be given to protecting these areas by screening or building design to achieve the lowest practicable levels. Achieving levels of 55 dB LAeq,T or less might not be possible at the outer edge of these areas, but should be achievable in some areas of the space.

## **3.0 Assessment**

### **General advice on partition walls**

- 3.1 Where there is no specific advice below and when the party walls are not directly adjacent to the proposed bar area or basement music area, normal construction methods can be used as long as they comply with current Building Regulations. The guidance matrix displayed in paragraph 2.5 can be used to determine the required insulation values for each partition. The insulation value -  $D_{nT,W}$  - is the equivalent of  $R_w$ , but is measured onsite rather than a laboratory.

### **Noise from the bar area**

- 3.2 The potential noise from the proposed bar area on the ground floor has the potential to be excessive in adjacent rooms.

- 3.3 There are no flats proposed directly adjoining the bar area since these are separated by a corridor or stairwell. Our recommendation is that normal construction methods can be used for the walls of these flats as long as they comply with current Building Regulations.
- 3.4 Currently there is a 150 mm concrete floor, with 50 mm screed, separating the bar area and the proposed residential flats on the basement floor, SAL recommends a suspended ceiling be constructed under the slab area above the flats comprising a double layer of 15 mm acoustic board (staggered and taped joints) with the 100 mm void filled with medium density mineral wool to protect the residents below.
- 3.5 It is recommended that a sound insulation test is undertaken before installing the suspended ceiling to ensure that the concrete slab has the expected sound insulation properties.
- 3.6 The proposal is for the first and second floors, above the bar area, to be used for offices. These areas are less sensitive to noise intrusion than are residential areas. However the original windows, linking the flats living area and the office area, should be closed off with care. The impact of activity within the bar area will not unduly impact office areas.

#### **Noise from events within the basement**

- 3.7 The potential impact from amplified music will have to be controlled carefully since the potential impacts are high.
- 3.8 The exact source noise level within the basement is unknown. However, at similar venues, it is common to measure reverberant noise levels of  $L_{AeqT} = 107$  dB. This source sound level has been assumed within this assessment.
- 3.9 The overall design principal that is recommended for the basement area, to attenuate noise adequately, is to build a room within a room.
- 3.10 On this basis, the suggested design should include a reinforced concrete and screed floor above the whole of the basement area with a minimum thickness of 250mm.
- 3.11 In addition, SAL recommends a suspended ceiling be constructed under the slab area above the source room comprising a double layer of 15 mm acoustic board (staggered and taped joints) with the 100 mm void filled with medium density mineral wool. It is hard to accurately predict the performance of this high performance structure. However this design should achieve an  $R_w$  of 65 dB.
- 3.12 To reduce the structure-borne noise travelling up walls of the source room to the floors above and to reduce airborne noise to flats on the basement level, SAL recommends that the walls be "lined" with second skin which has no connections to the outer wall. This is an

important component of the room within a room design principal. SAL recommends that this inner skin be constructed from a double layer of 15 mm acoustic board (staggered and taped joints) with the 100 mm void filled with medium density mineral wool.

#### **Noise to nearby properties**

- 3.13 It will be necessary to provide adequate ventilation. Any ventilation inlet or outlet should be attenuated and care should be taken on the direction of the inlet/outlet to ensure they do not point at any noise-sensitive receivers – on-site or nearby.
- 3.14 Any noise from mechanical plant will have to be attenuated in order to comply with the provisions of BS4142:2014.
- 3.15 The layout indicates that basement light wells are proposed on the terrace area outside flats 3, 4 and 5 above the footprint of the basement (only shown on the sections). This arrangement should be avoided if at all possible since this will be a weak link in the structure. However if this is necessary then the acoustic insulation will be required.
- 3.16 The calculated noise level at the houses to the rear of the development is  $LA_{eqT} = 35$  dB (façade level). This assumes an internal reverberant noise level of 107dBA (see above).
- 3.17 It is recommended that when the design is finalised it is sent to SAL for re-evaluation.

## Appendix A

Existing layout

# REVISIONS

BRITISH A. GENERAL ARCHITECTS P.L.C. 15 AUG 88

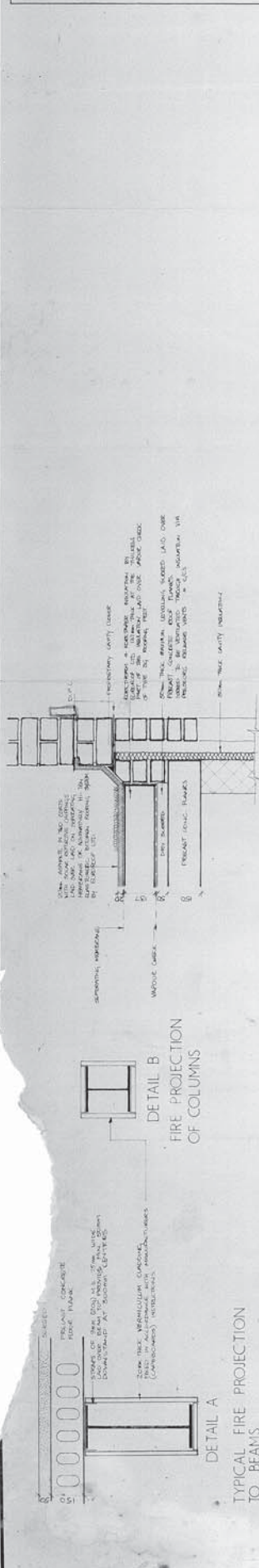
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ROYAL BRITISH  
LEGION

JOB  
399/401 HIGH ROAD  
TOTTENHAM

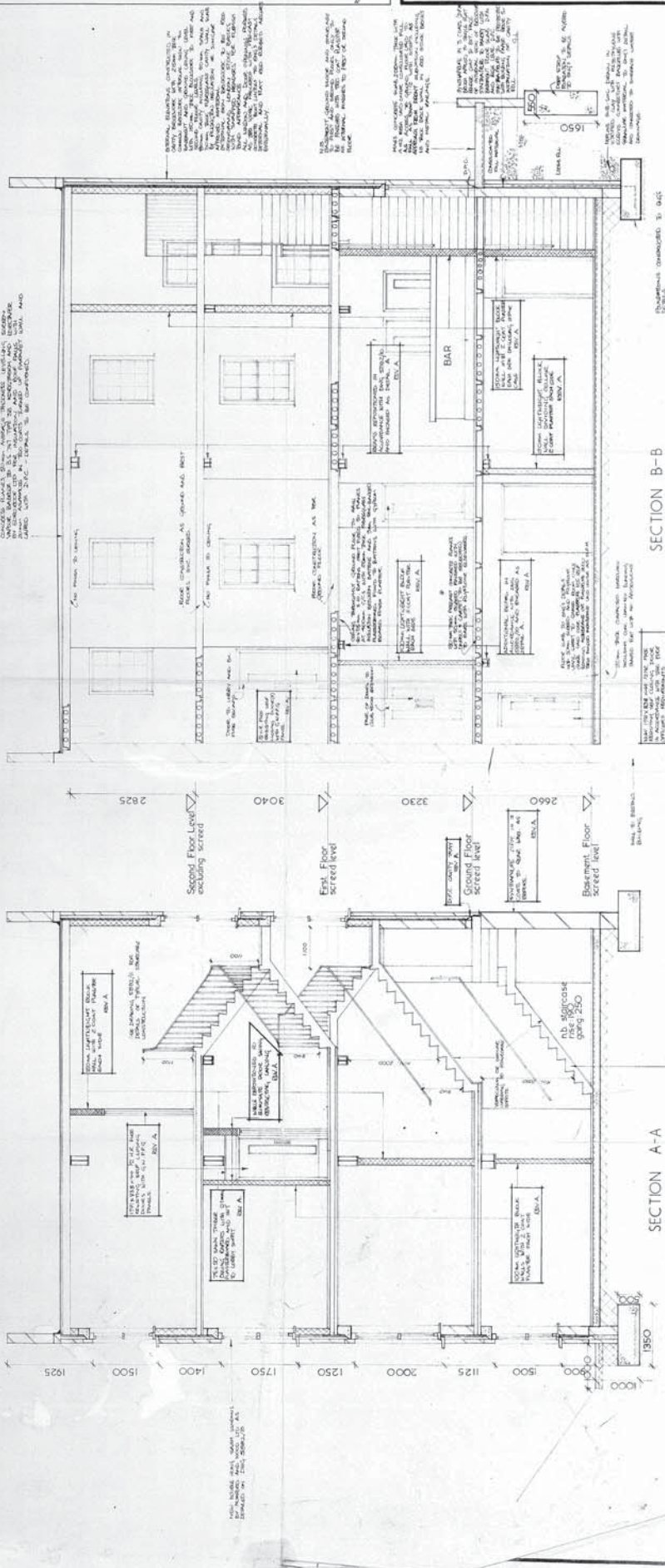
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Scale 1/50  
Date JUNE 88  
Drawn

**CALE HEATH & CO**  
Building Design Section  
171 Fleet Street  
Telephone Number 01-553 16



ROOF / PARAPET DETAIL



SECTION B-B

SECTION A-A

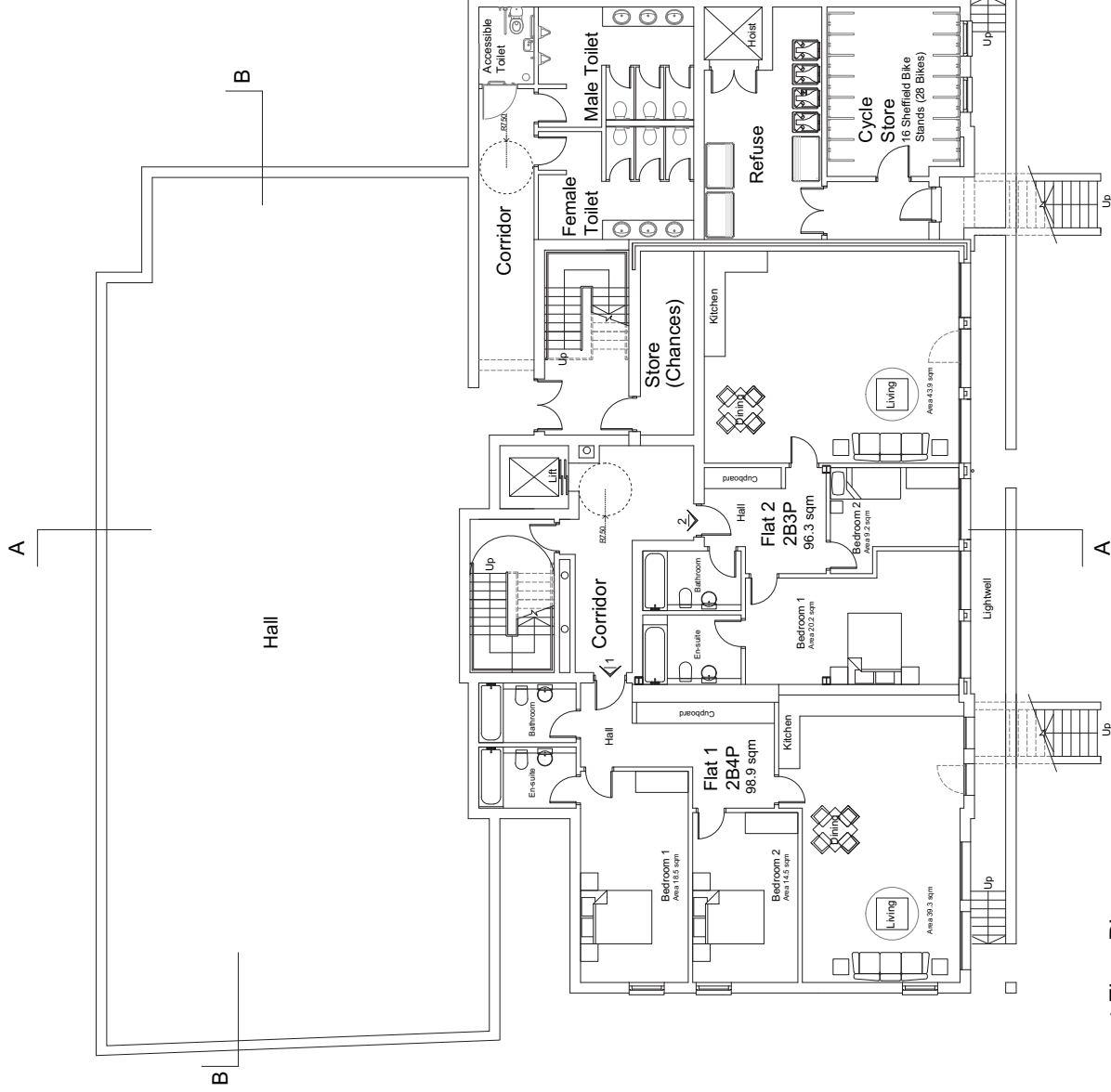
Ground Floor screed level

Basement screed level

ELEVATION OF BASEMENT ACCESS

## Appendix B

Layout of proposed development



Basement Floor Plan

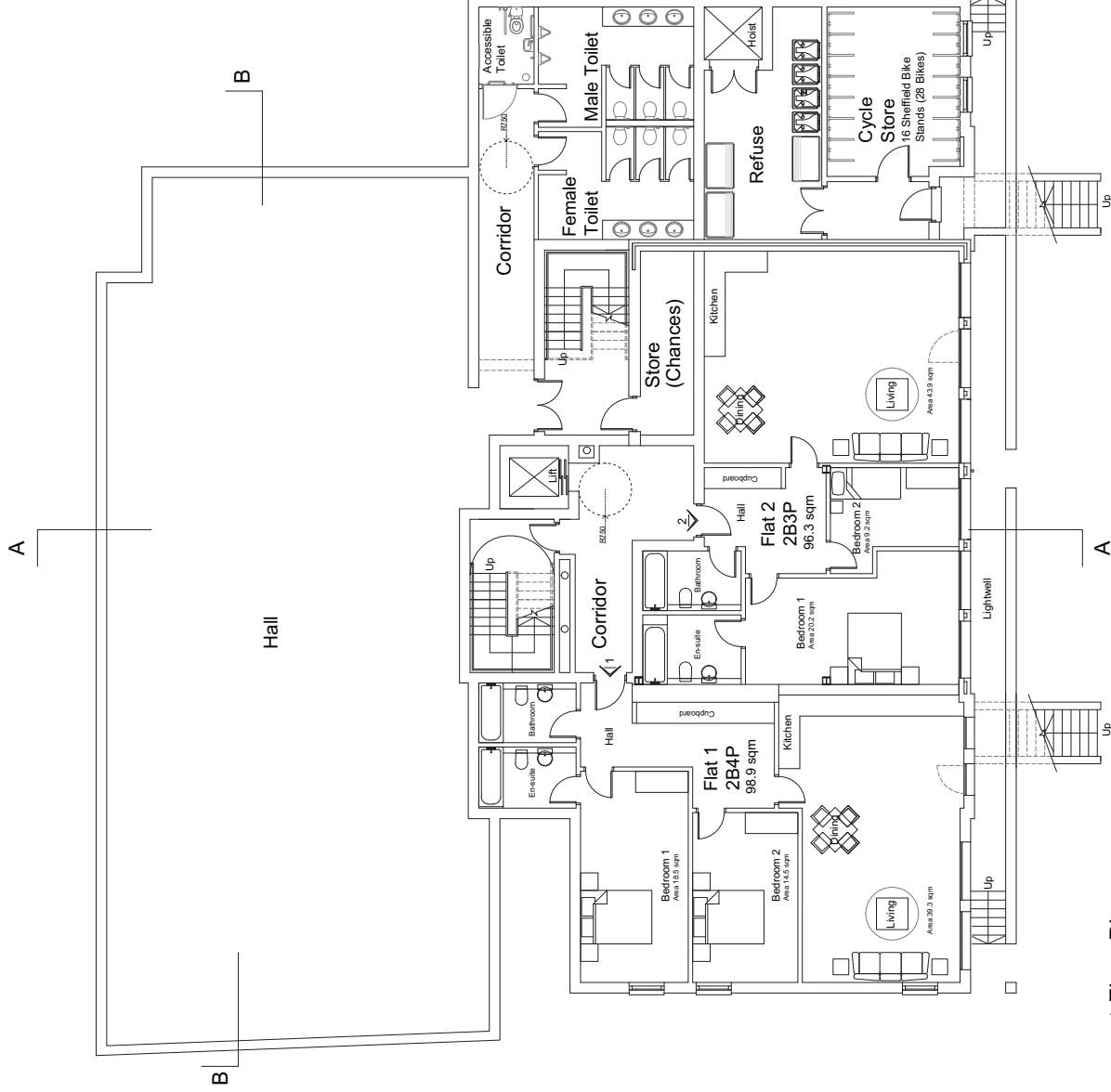


REV	DATE	COMMENTS
R	28-11-14	Layout revised to incorporate planners comments
Q	08-10-14	Layout revised
P	08-09-14	Layout revised
O	18-08-14	Layout revised
N	16-07-14	External window/doors revised
M	08-07-14	Cycle store revised/steps added
L	02-06-14	Windows added to bathrooms in flats 1 & 4
K	23-05-14	Plan revised

PLANNING
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**ard architects**  
125 Tottenham Road  
London N17 6QN  
Tel: 020 7353 8888  
Email: info@ardarchitects.co.uk  
Web: www.ardarchitects.co.uk

PROJECT:	399 Tottenham High Road London N17 6QN
SUBJECT:	PROPOSED BASEMENT FLOOR PLAN
DRAWING NO.:	311/12
SCALE:	1:100 @ A2
DATE:	JULY 2013
DRAWN BY:	PT
CHECKED BY:	DA
REV:	K L M N O P Q R



Basement Floor Plan



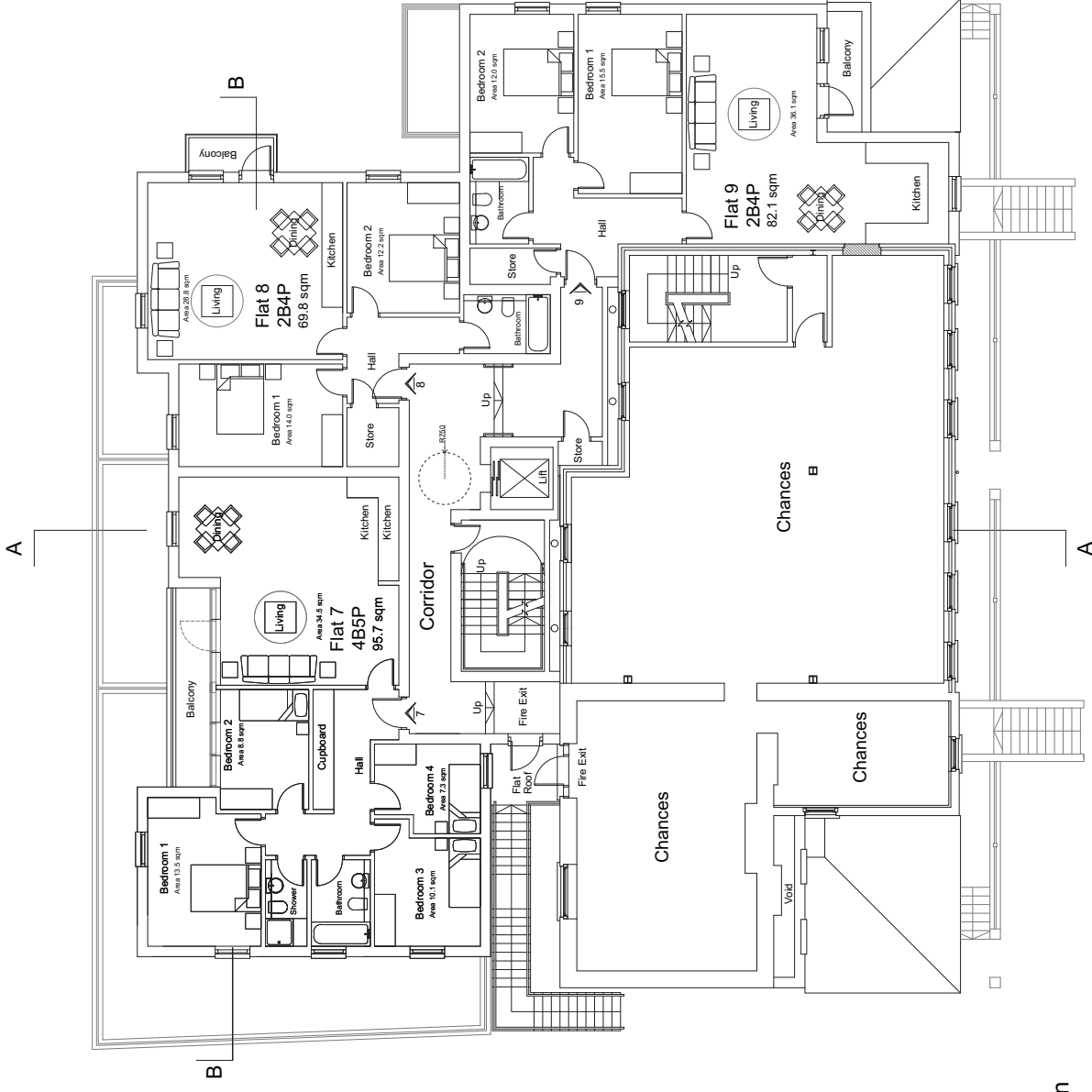
REV	DATE	COMMENTS
R	28-11-14	Layout revised to incorporate planners comments
Q	08-10-14	Layout revised
P	08-09-14	Layout revised
O	18-08-14	Layout revised
N	16-07-14	External window/doors revised
M	08-07-14	Cycle store revised/steps added
L	02-06-14	Windows added to bathrooms in flats 1 & 4
K	23-05-14	Plan revised

PLANNING
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**ard architects**  
125 Tottenham Road  
London N17 6QN  
Tel: 020 7353 8888  
Email: info@ardarchitects.co.uk  
Web: www.ardarchitects.co.uk

PROJECT:	399 Tottenham High Road London N17 6QN
SUBJECT:	PROPOSED BASEMENT FLOOR PLAN
DRAWING NO.:	311/12
SCALE:	1:100 @ A2
DATE:	JULY 2013
DRAWN BY:	PT
CHECKED BY:	DA
REV:	K L M N O P Q R





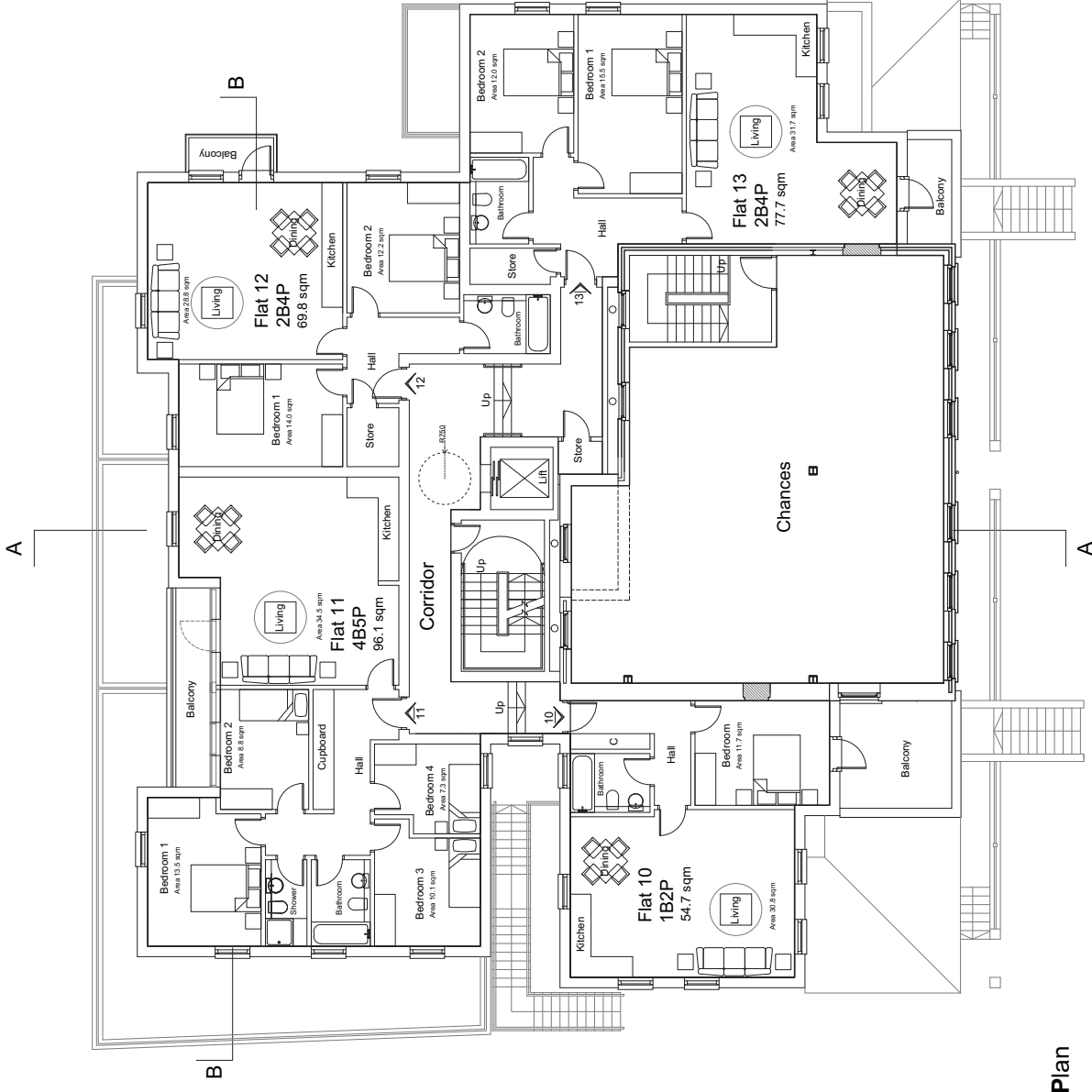
First Floor Plan

REV	DATE	COMMENTS
T	26-11-14	Layout revised to incorporate planners comments
S	24-10-14	Flat 8 revised
R	09-10-14	Layout revised
Q	08-09-14	Layout revised
P	18-08-14	Layout revised
O	18-07-14	Flats re-numbered/Flat 10 area revised
N	15-07-14	Plan revised to planners requirements
M	08-07-14	Flat added to north elevation
L	02-06-14	Window added to bathroom in flat 10
K	23-05-14	Plan revised

PLANNING
----------

**oag ARCHITECTS**  
125 Tottenham Road  
London N17 6QN  
Tel: 020 7353 8888  
Email: info@oagarchitects.co.uk  
Web: www.oagarchitects.co.uk

PROJECT:	399 Tottenham High Road London N17 6QN
SUBJECT:	PROPOSED FIRST FLOOR PLAN
DRAWING NO:	311/14
SCALE:	1:100 @ A2
DATE:	JULY 2013
DRAWN BY:	PT
CHECKED BY:	DA
REV:	K L M N O P Q R S T



Second Floor Plan



REV	DATE	COMMENTS
T	26-11-14	Layout revised to incorporate planners comments
S	24-10-14	Flat 12 revised
R	08-10-14	Layout revised
Q	08-09-14	Layout revised
P	18-08-14	Layout revised
O	18-07-14	Floors re-numbered
N	15-07-14	Plan revised to planners requirements
M	08-07-14	Flat added to north elevation
L	02-06-14	Balustrade revised
K	23-05-14	Plan revised
REV	DATE	COMMENTS

P L A N N I N G



PROJECT:	399 Tottenham High Road London N17 6QN
SUBJECT:	PROPOSED SECOND FLOOR PLAN
DRAWING NO:	311/15
SCALE:	1:100 @ A2
DATE:	JULY 2013
DRAWN BY:	PT
CHECKED BY:	DA
REV:	K L M N O P Q R S T



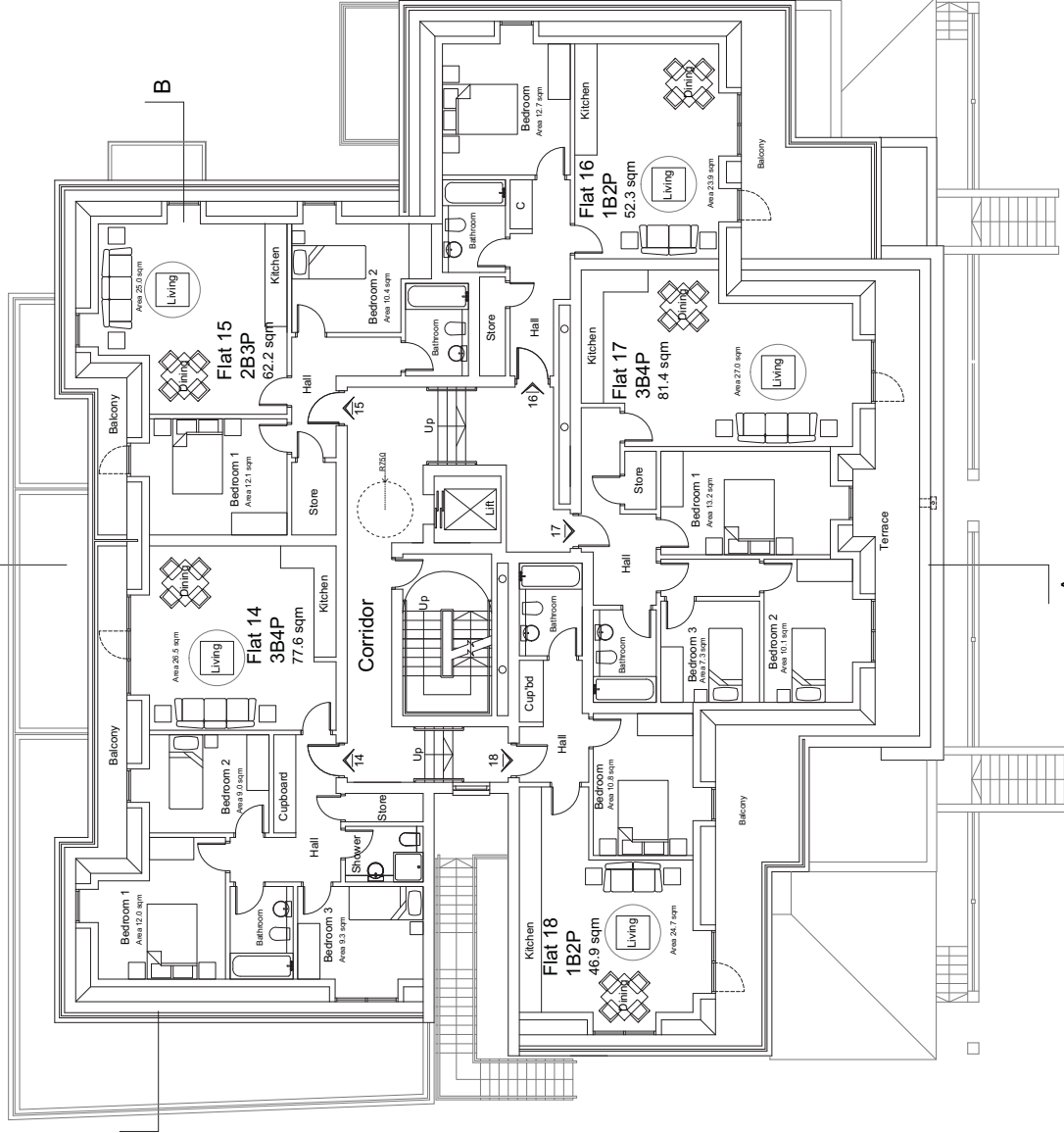
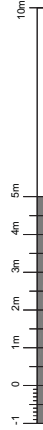
A

B

B

A

### Third Floor Plan

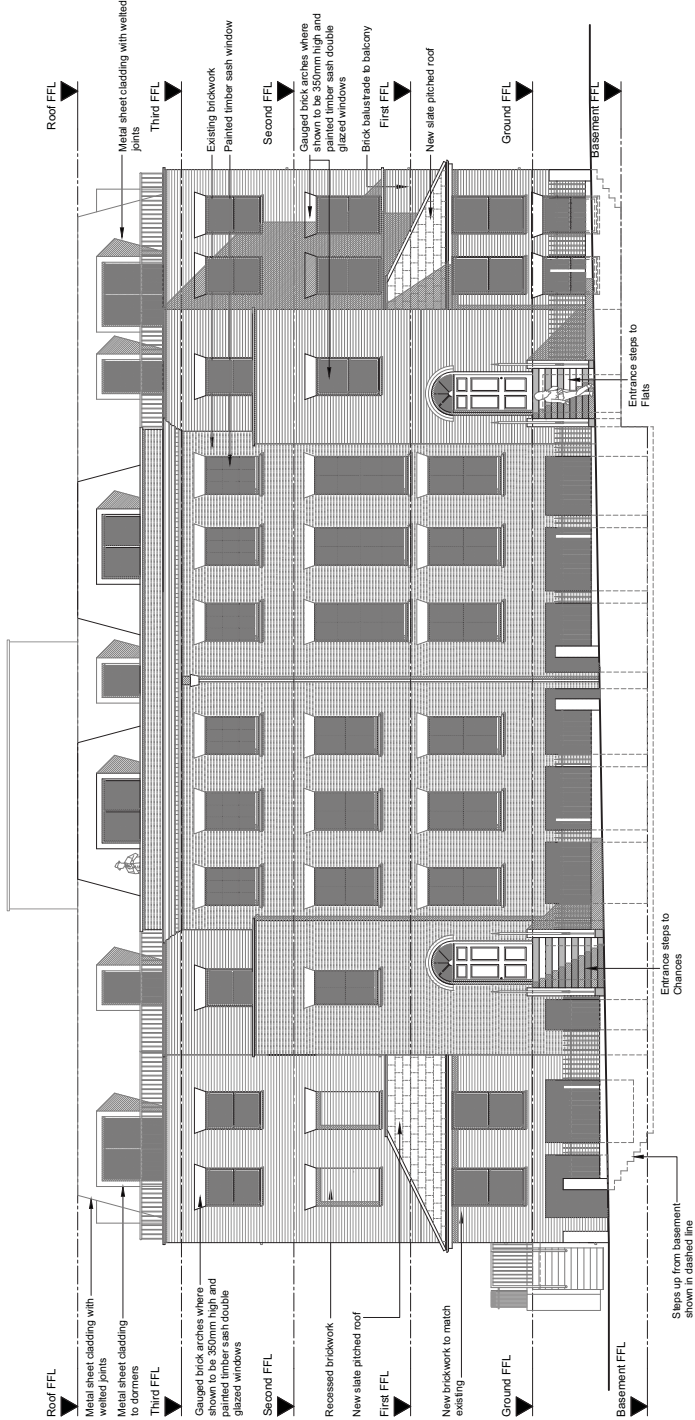


REV	DATE	COMMENTS
T	26-11-14	Layout revised to incorporate planners comments
S	24-10-14	Balconies revised
R	08-10-14	Layout revised
Q	08-09-14	Layout revised
P	18-08-14	Layout revised
O	18-07-14	Flats numbered/flat 19 bedroom added
N	15-07-14	Plan revised to planners requirements
M	08-07-14	Flat added to north elevation
L	02-06-14	Window revised in flat 18
K	23-05-14	Plan revised

PLANNING
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PROJECT:	399 Tottenham High Road London N17 6QN
SUBJECT:	PROPOSED THIRD FLOOR PLAN
DRAWING NO:	311/16
SCALE:	1:100 @ A2
DATE:	JULY 2013
DRAWN BY:	PT
CHECKED BY:	DA
REV:	K L M N O P Q R S T



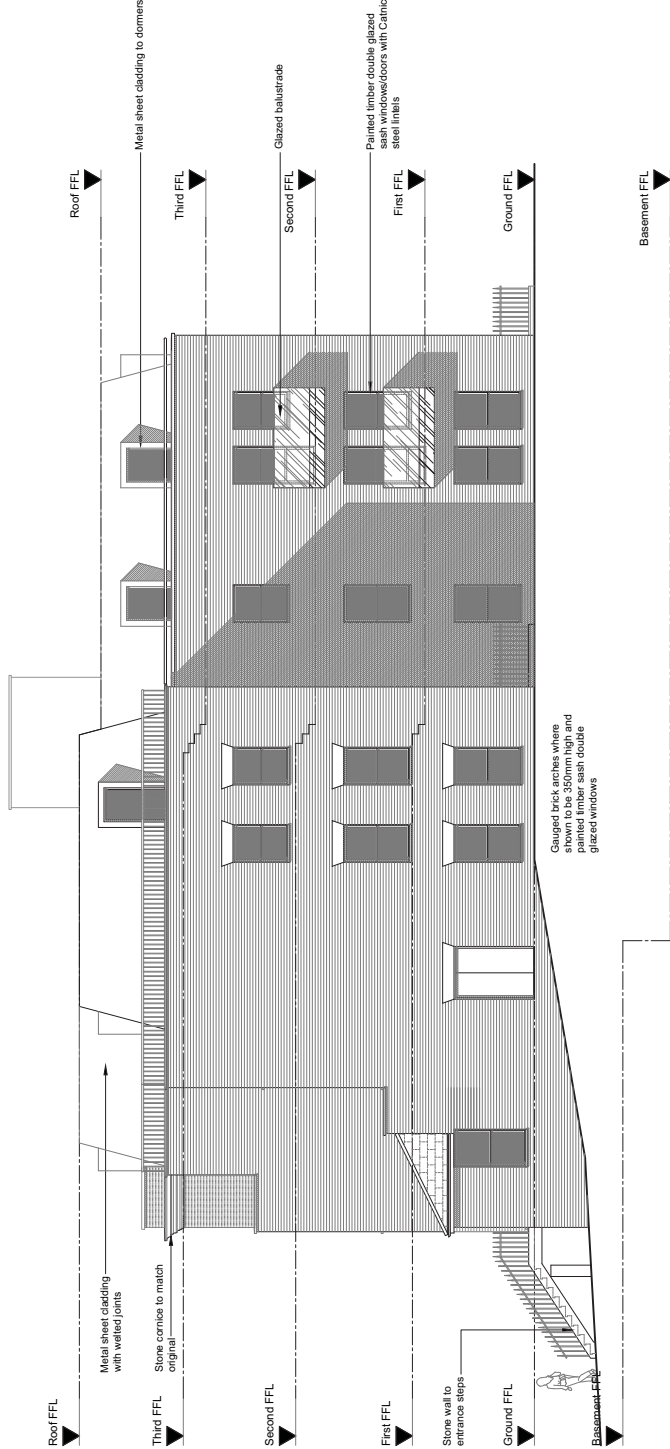
High Road Elevation

REV	DATE	COMMENTS
Q	26-11-14	Elevation revised to incorporate planners comments
P	24-10-14	Brick window heads added
O	13-10-14	Elevation revised
N	08-09-14	Elevation revised
M	19-08-14	Elevation revised
L	15-07-14	Elevation revised to planners requirements
K	08-07-14	Elevation revised to re-configured plans
J	02-06-14	Roofline revised
I	23-05-14	Elevation revised

P L A N N I N G	
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399 ARCHITECTS  
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T: 020 7353 1111  
E: info@399architects.org.uk  
W: www.399architects.org.uk

PROJECT: 399 Tottenham High Road London N17 6QN	
SUBJECT: PROPOSED HIGH ROAD ELEVATION	
DRAWING NO: 31/1/18	
SCALE: 1:100 @ A2	DATE: JULY 2013
DRAWN BY: PT	CHECKED BY: DA
REV: I	J K L M N O P Q



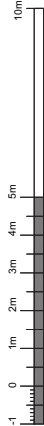
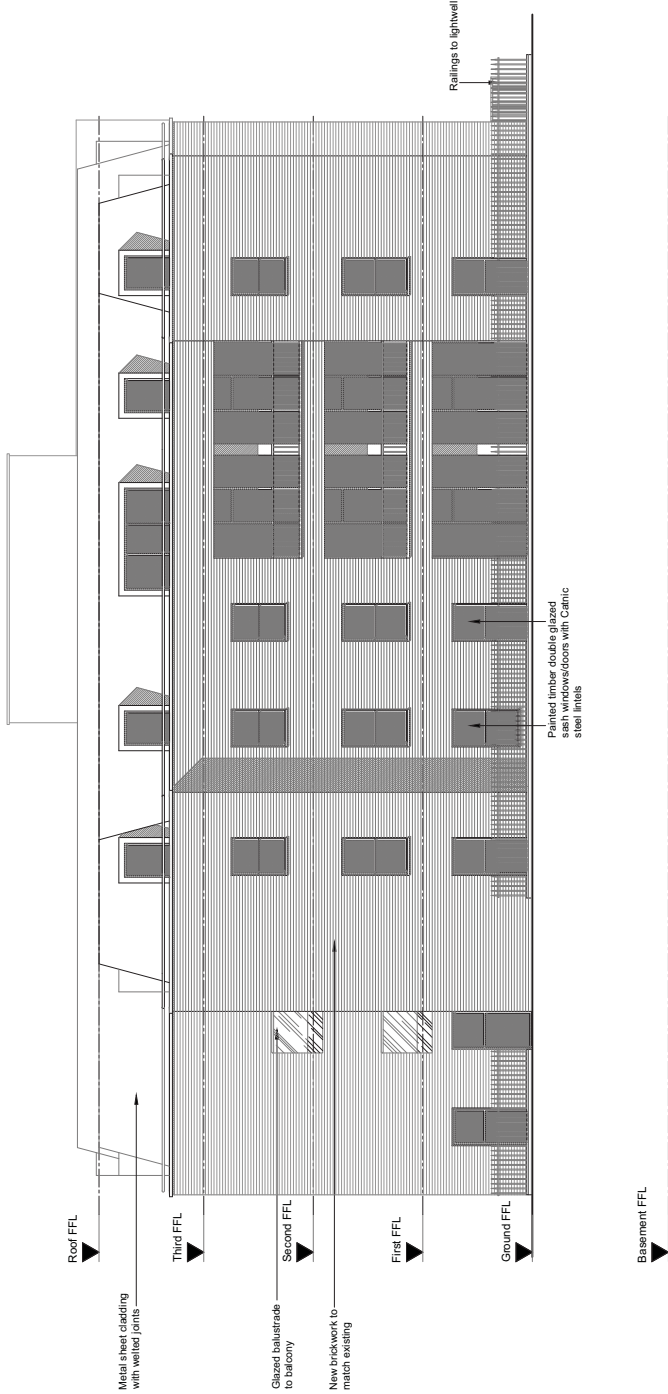
North Elevation

REV	DATE	COMMENTS
P	26-11-14	Elevation revised to incorporate planners comments
O	24-10-14	Third floor balcony revised
N	20-10-14	Elevation revised
M	08-09-14	Elevation revised
L	29-08-14	Elevation revised
K	15-07-14	Elevation revised to planners requirements
J	08-07-14	Elevation revised to re-configured plans
I	02-06-14	Roofline revised
H	23-05-14	Elevation revised

P L A N N I N G

**o d g** ARCHITECTS  
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London N17 6QN  
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Web: www.odgarchitects.co.uk

PROJECT:	399 Tottenham High Road London N17 6QN
SUBJECT:	PROPOSED NORTH ELEVATION
DRAWING NO:	311/19
SCALE:	1:100 @ A2
DATE:	JULY 2013
DRAWN BY:	PT
CHECKED BY:	DA
REV:	H I J K L M N O P



West Elevation

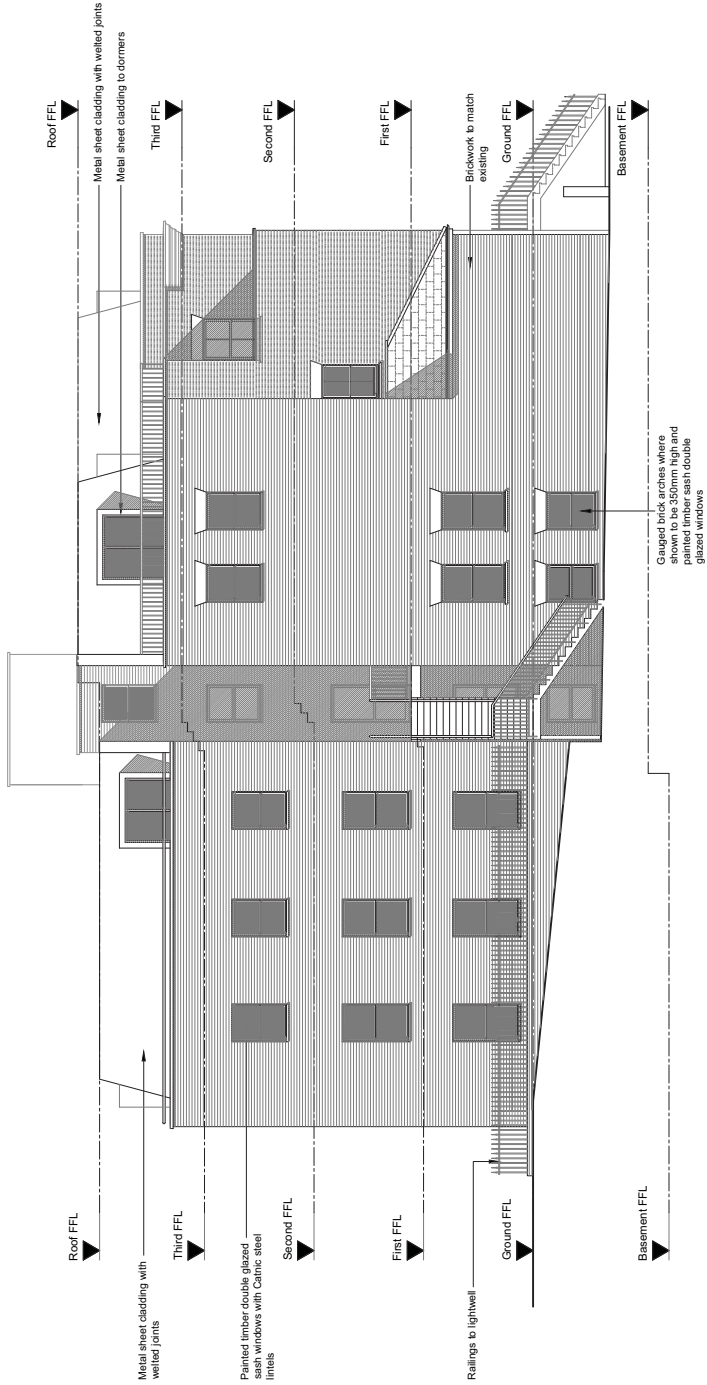
I	26-11-14	Elevation revised to incorporate planners comments
H	31-10-14	First/second floor balconies revised
G	24-10-14	Third floor balconies revised
F	13-10-14	Elevation revised
E	08-09-14	Elevation revised
D	29-08-14	Elevation revised
C	16-07-14	Elevation revised to planners requirements
B	08-07-14	Elevation revised to re-configured plans
A	02-06-14	Elevation revised
REV	DATE	COMMENTS

P L A N N I N G

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Web: www.oqdarchitects.org.uk

PROJECT:	399 Tottenham High Road London N17 6QN
SUBJECT:	PROPOSED WEST ELEVATION
DRAWING NO:	31/1/20
SCALE:	1:100 @ A2
DATE:	JAN 2014
DRAWN BY:	PT
CHECKED BY:	DA
REV:	A B C D E F G H I



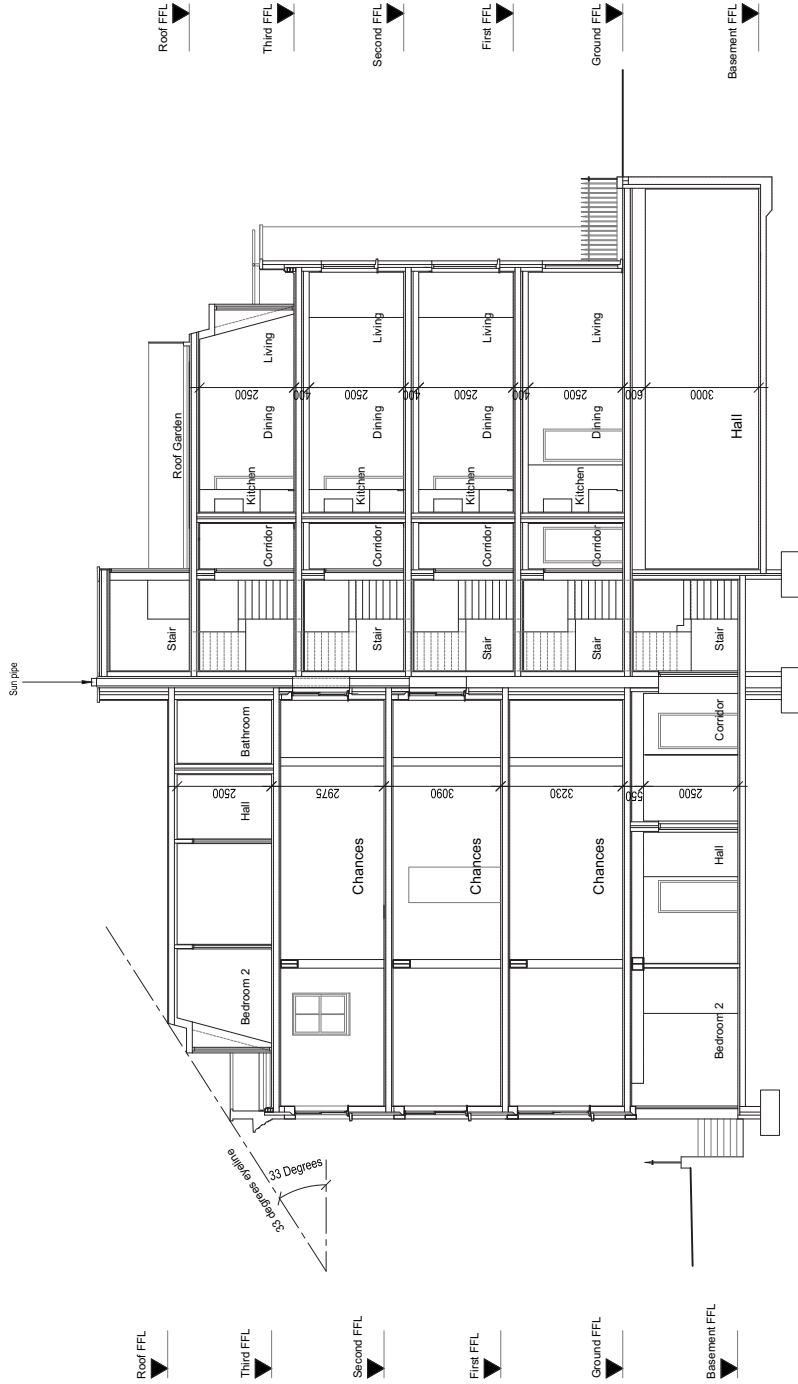
South Elevation

H	26-11-14	Elevation revised to incorporate planners comments
G	24-10-14	Third floor balcony revised
F	20-10-14	Elevation revised
E	08-09-14	Elevation revised
D	29-08-14	Elevation revised to planners requirements
C	16-07-14	Elevation revised to re-configured plans
B	08-07-14	Elevation revised
A	02-06-14	Elevation revised
REV	DATE	COMMENTS

P L A N N I N G

399 Tottenham Road  
London  
N17 6QN  
Tel: 020 7353 8888  
Email: info@399tottenham.co.uk  
Web: www.399tottenham.co.uk

PROJECT:	399 Tottenham High Road London N17 6QN
SUBJECT:	PROPOSED SOUTH ELEVATION
DRAWING NO:	311/21
SCALE:	1:100 @ A2
DATE:	JAN 2014
DRAWN BY:	PT
CHECKED BY:	DA
REV:	A B C D E F G H



Section A-A

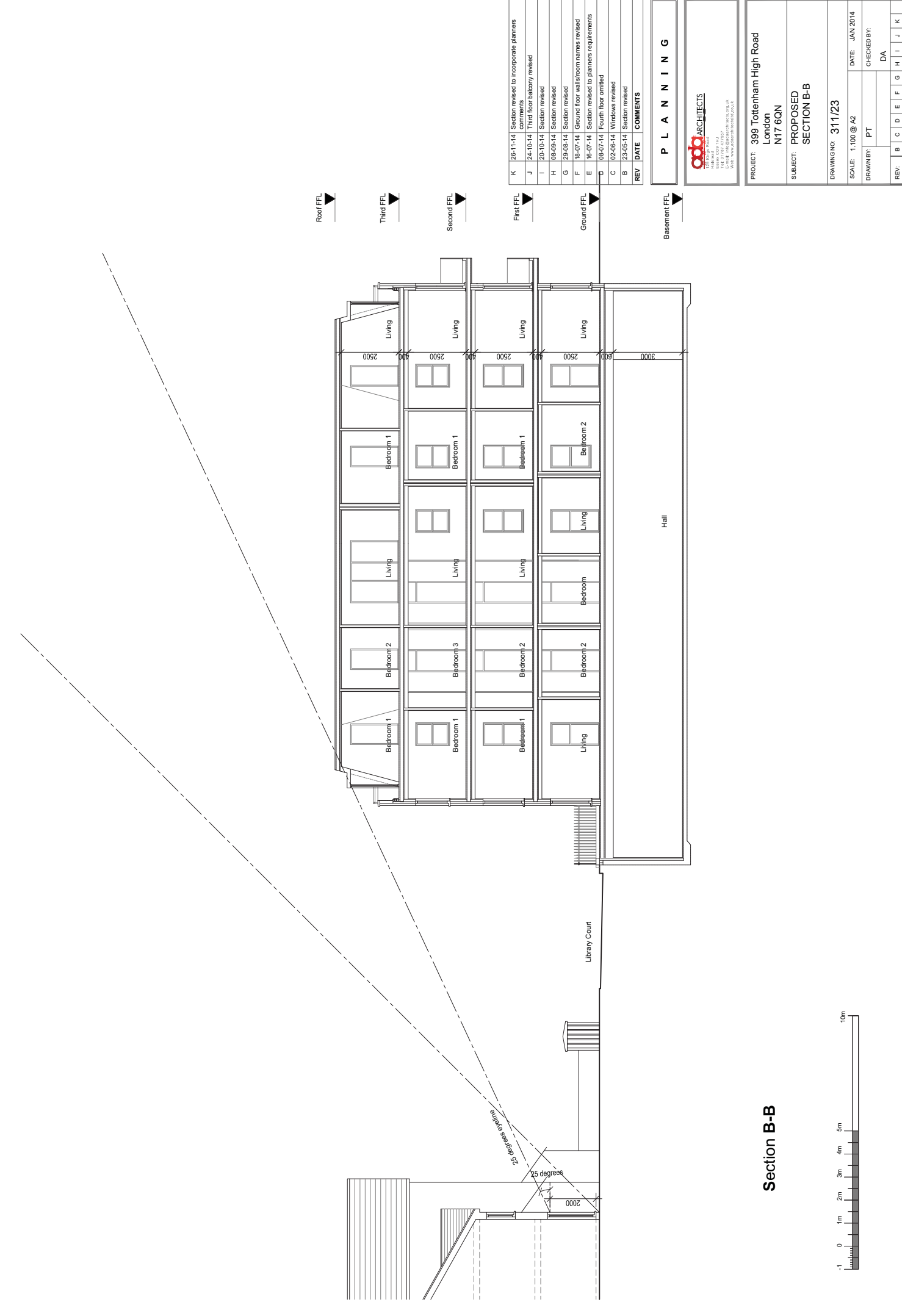
REV	DATE	COMMENTS
J	26-11-14	Section revised to incorporate planners comments
I	24-10-14	Third floor balcony revised
H	20-10-14	Section revised
G	08-09-14	Section revised
F	29-08-14	Section revised
E	16-07-14	Section revised to planners requirements
D	08-07-14	Fourth floor omitted
C	02-06-14	Ramp windows/roof to stair revised
B	23-05-14	Section revised

P L A N N I N G

**o d g** ARCHITECTS  
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London N17 6QN  
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Web: www.odgarchitects.co.uk

PROJECT:	399 Tottenham High Road London N17 6QN
SUBJECT:	PROPOSED SECTION A-A
DRAWING NO:	311/22
SCALE:	1:100 @ A2
DATE:	JAN 2014
DRAWN BY:	WJH
CHECKED BY:	DA
REV:	B C D E F G H I J





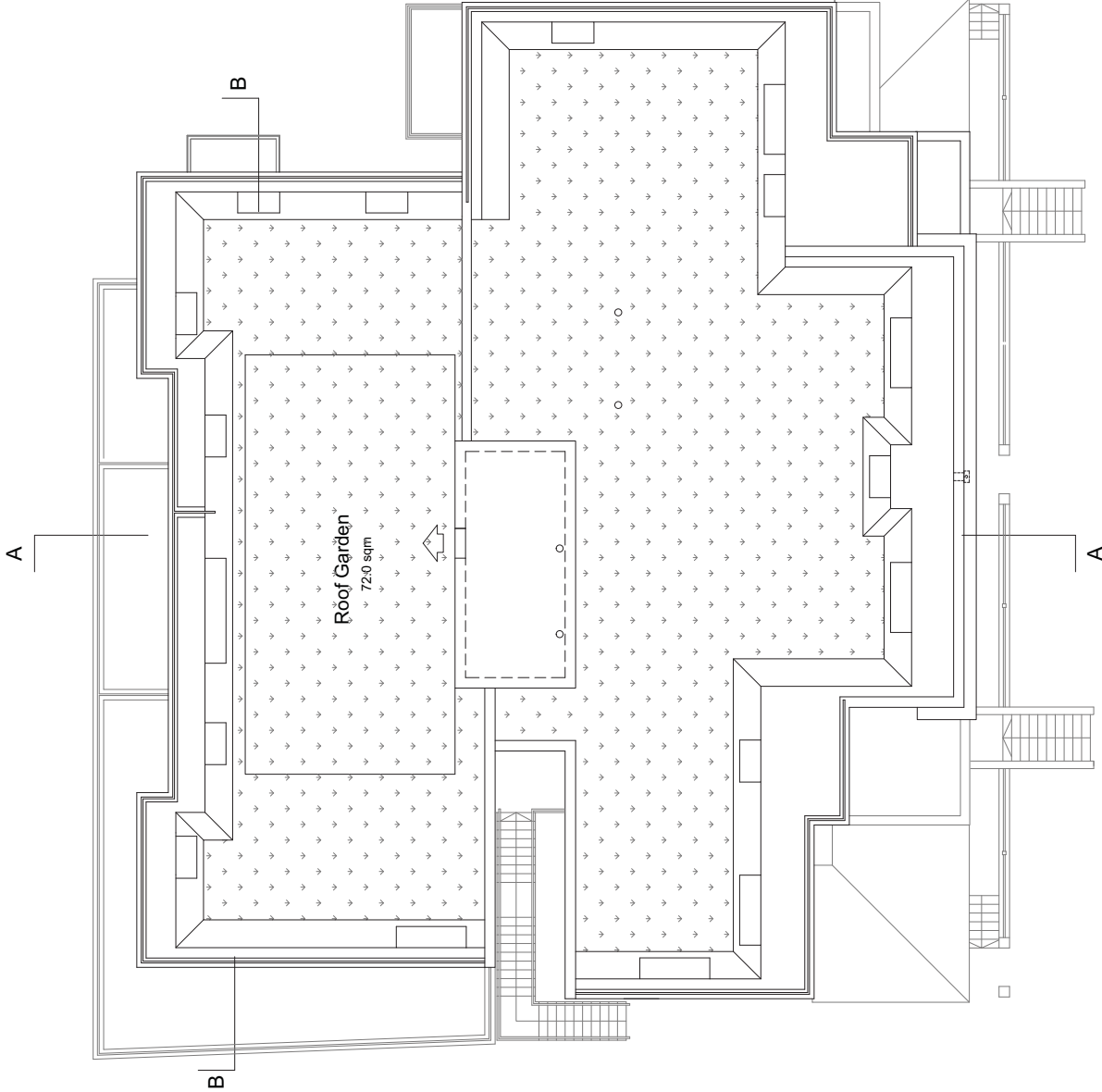
Roof FFL  
Third FFL  
Second FFL  
First FFL  
Ground FFL  
Basement FFL

REV	DATE	COMMENTS
K	26-11-14	Section revised to incorporate planners comments
J	24-10-14	Third floor balcony revised
I	20-10-14	Section revised
H	08-09-14	Section revised
G	29-08-14	Section revised
F	18-07-14	Ground floor wall/room names revised
E	16-07-14	Section revised to planners requirements
D	08-07-14	Fourth floor omitted
C	02-06-14	Windows revised
B	23-05-14	Section revised

P L A N N I N G

**odg ARCHITECTS**  
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Web: www.odgarchitects.co.uk

PROJECT:	399 Tottenham High Road London N17 6QN
SUBJECT:	PROPOSED SECTION B-B
DRAWING NO:	311/23
SCALE:	1:100 @ A2
DATE:	JAN 2014
DRAWN BY:	PT
CHECKED BY:	DA
REV:	B C D E F G H I J K



Roof Plan

REV	DATE	COMMENTS
J	26-11-14	Layout revised to incorporate planners
I	24-10-14	Balconies revised
H	17-10-14	Plan revised
G	08-09-14	Plan revised
F	29-08-14	Plan revised
E	15-07-14	Plan revised to planners requirements
D	08-07-14	Roof plan revised
C	02-06-14	Roof to stair/roof garden balustrade revised
B	23-05-14	Plan revised

P L A N N I N G

123 ARCHITECTS  
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London N17 6QN  
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Web: www.123architects.co.uk

PROJECT:	399 Tottenham High Road London N17 6QN
SUBJECT:	PROPOSED ROOF PLAN
DRAWING NO:	311/24
SCALE:	1:100 @ A2
DATE:	JULY 2013
DRAWN BY:	PT
CHECKED BY:	DA
REV:	B C D E F G H I J

Do not scale this drawing.  
Dimensions to be taken on site and all discrepancies reported to the CA



C	26-11-14	Elevation revised to incorporate planners comments
B	24-10-14	Brick window heads added
A	20-10-14	Elevation revised
REV	DATE	COMMENTS

P L A N N I N G

**ooba ARCHITECTS**  
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Tel: 01753 477517  
www.oobaarchitects.co.uk

PROJECT:  
399 Tottenham High Road  
London N17 6QN

SUBJECT:  
Tottenham High Road Elevation

DRAWING NO: 311/50

SCALE: 1200 @ A2	DATE: August 2014
DRAWN BY: PT	CHECKED BY: DA
REV: A B C	



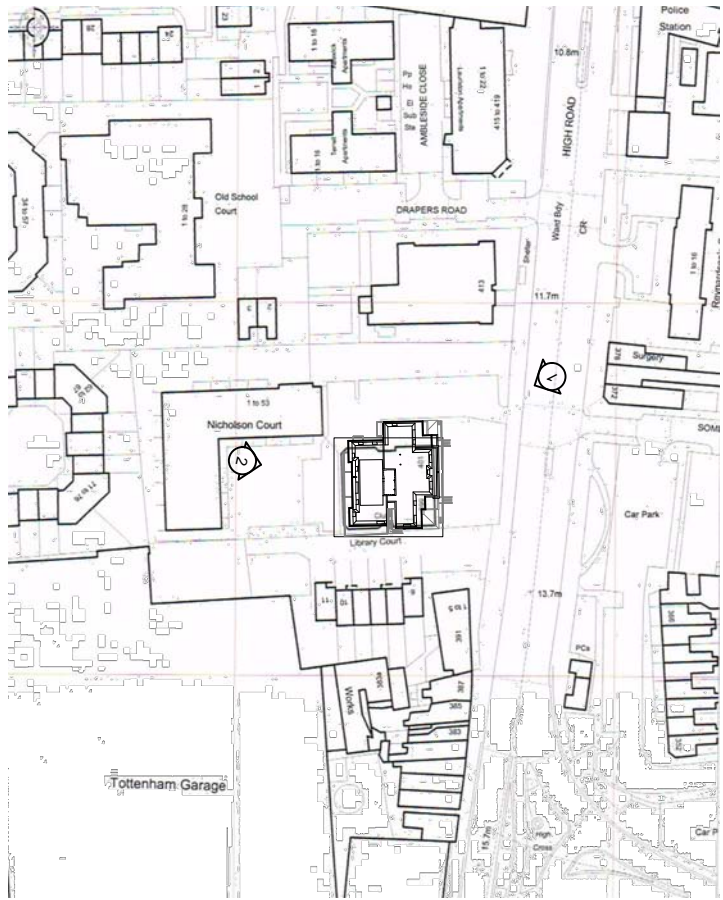
Do not scale this drawing.  
Dimensions to be taken on site and all discrepancies reported to the CA



Proposed View 1 from High Road, Tottenham



Proposed View 2 from  
Nicholson Court



Location Plan - Not to Scale

-	-	-
REV	DATE	COMMENTS
P L A N N I N G		
<div>adaARCHITECTS</div> <div>128 Kings Road Halestead Essex CO9 1SL Tel: 01787 477557 E-mail: info@adaarchitects.org.uk Web: www.adaarchitectsld.co.uk</div>		
PROJECT: 399 Tottenham High Road London N17 6QN		
SUBJECT: Proposed Views from Tottenham High Road/Nicholson Court		
DRAWING NO: 311/51		
SCALE: NTS @ A2		DATE: January 2015
DRAWN BY:	PT	CHECKED BY:
		DA
REV:	-	



# TOTTENHAM WAR SERVICES INSTITUTE

## Construction Management Plan

**March 2015**

**CONSTRUCTION MANAGEMENT PLAN**

**399-401 High Road Tottenham London N17 6QN**

### **Introduction**

This construction management plan has been produced for in accordance with all current policies and procedures. Set out below is a brief overview of the systems and procedures we would intend to utilize in controlling the construction operations on site, ensuring all IPOS Ltd standards and protocols are adhered to in order to progress the project in the most safe and efficient manner possible.

### **Site location**

The site is situated at 399-401 High Road Tottenham London N17 6QN

### **Outline of Redevelopment Scheme**

The site comprises the existing Club, Hall and Office premises

The development entails alterations and extensions to the existing building, the provision of a new entertainment hall at basement level and the erection of a roof extension and rear extension to provide 17 flats.

### **Existing Boundaries**

The site is fronting High Road Tottenham to the east. To the west and north of the site is Nicholson Court, a block of flats with access through the site and separated by a fence. To the south, separated by a fence is a service road to Library Court, a development of 6 houses but with no connection to the application site.

### **Site access and traffic management systems**

#### **Traffic systems and restrictions**

Construction vehicular access for the construction of the warehouse will be via the existing entrance. This will be controlled by a traffic marshal. The traffic marshal will ensure all deliveries are removed from the public highway and onto site as shown upon their arrival, minimising the construction impact on the neighbouring environment. A wheel wash facility will be provided to ensure all vehicles leave site in a clean and safe condition.

Contractor's and visitors cars will have to park in the surrounding area as there will be no parking on site. Site accommodation will be located within the site compound.

Strict material delivery scheduling and booking systems will be imposed on the project to ensure that congestion is avoided. Each delivery will be allocated a delivery time period and an allotted area from which to load or unload. This will be suitable for the material being delivered and will adhere to site working hours.

Clear instructions will be issued to all direct suppliers and subcontractors detailing access routes. All vehicle deliveries should enter Windermere Road from Brighton Road.

These delivery areas will be clearly identified on site and be serviced accordingly by either crane or forklift. Proposed delivery areas will also be illustrated on a copy of the site layout plan. Deliveries waiting on site for unloading will be safely positioned along Windermere road and directed into their allotted waiting area by our traffic marshal who will ensure that any vehicle waiting is not left unattended and has the engine turned off.

requirements during these works and any service alterations with temporary footpaths provided for the public

The boundaries of the site will be protected by a 2m high hoarding or existing walls. Once the existing buildings have been fully decommissioned we will then commence the asbestos removal and demolition of the buildings.

#### **Access/Egress to/from Site:-**

- Access to the site is via the main site entrance.
- The Contractor and his subcontractors and suppliers must not obstruct the access and that access is available at all times for fire appliances, refuse vehicles, ambulances and other emergency services plus client's staff.
- Parking of construction personnel vehicles and construction vehicles will be strictly controlled due to limited space on site.
- Method Statements for specific works will specify any restrictions that are necessary.
- Deliveries will be coordinated to avoid congestion on site.
- Deliveries and lorries from the site will be supervised.
- Adequate temporary measures (signage) will be put in place to maintain the escape routes from the site.
- Adequate barriers will be put in place around site to prevent unauthorised entry and to segregate the working area from public areas.
- Suitable means of escape will be provided to enable occupants to evacuate from the works area in an emergency.

#### **Highways**

We will work closely with the local authority to arrange parking suspensions in High Road and close off the various existing public paths as necessary to carry out these works.

#### **Emergency services routes and access by third parties**

Access for emergency services on site will be via the site access routes and emergency escape routes. Local Emergency Services will be notified of the access points before work starts on site and in due time before access arrangements are relocated. A traffic marshal located at the main site entrance will ensure that safe access routes are always maintained for emergency services.

#### **Police requirements**

No specific Police requirements are envisaged. We will however maintain regular contact with the Police on such matters as abnormal load licences and be fully cooperative with any unforeseeable matters.

#### **Local Environmental considerations**

As the site is located within a primarily residential and commercial area it is our intention to minimise the impact that the construction process could cause to the Local Environment and the neighbouring community.

All care will be taken not to cause the primary environmental nuisances, noise and dust pollution. Below are some actions that will be carried out to abate these problems. We would also arrange to visit local residents to give a presentation prior to and during the construction phases to warn of the dangers of construction sites.

**Reduction in noise disruption will be achieved by: -**

- Coordinated delivery times and efficient traffic management to prevent queues of traffic accessing the site
- Ensuring all plant has sound reduction measures (mufflers, baffles or silencers)
- Utilising construction techniques that minimise the production of noise.
- Utilisation, where possible of pre-fabricated components
- Utilisation of baffle system during the demolition process.
- Strict adherence to the site working hours.
- Using Acoustic hoarding where necessary.

**Reduction in dust pollution and other airborne debris will be achieved by: -**

- We will establish air quality procedures to minimise dust generation and control plant and vehicle exhaust emissions.
- Ensure that all materials transported to and from site are in enclosed containers or fully sheeted.
- Ensuring stock piles of topsoil etc are kept below hoarding heights and kept damp in dry windy conditions. Once weeds and grass have grown again on the piles this will reduce the risk
- During dry periods the works are to be damped down to control the generation of dust.
- Ensuring materials have a minimum of packaging
- Ensuring all polystyrene and similar light weight materials are weighted down
- Making sure all dust generating materials are adequately packaged
- Ensuring all vehicles leaving the site have been through the wheel wash and that loads are covered where spoil or demolition material is being removed.
- Provide regular road cleaning using road sweepers or brushes to control dust and mud.
- Keeping the loading drop heights of spoil into lorries as low as possible.
- Implementing an effective procedure to deal with complaints from third parties to ensure issues are dealt with efficiently and quickly, via an advised and dedicated telephone number.

**In addition to the above provisions the following measures will be taken to reduce any further negative effects on the environment: -**

- Ensuring all contaminants kept on site are safely stored with the necessary procedures put in place for leaks and spillages etc.
  - A waste management system will be implemented on site.
- We treat environmental issues seriously and will carry out good management practises to minimise the effects of noise and dust on the environment and local community. We will also liaise with the local neighbours regarding any other sensitive environmental issues that need to be addressed.

**SITE SETUP**

**Site Access**

The site will be accessible via the entrance in High Road. The entrance will have double gates and be staffed by a traffic marshal.

Welfare facilities and site offices for the principal contractor and all subcontractors will be located here within the secure compound. This is screened from adjoining premises.

Operatives can only access the site working areas after receiving induction training. Site notice boards will be displayed at the site entrance and will display the project particulars, contact details, access and egress procedure, site rules and all necessary health and safety information.

**Control of construction traffic**

All site traffic will be directed to the entrance by use of directional signage.

We have not yet finalised the ground works specification and methodology but anticipate all excavated and demolished materials will be removed from site. Suppliers and subcontractors will be notified in advance of the desired location for delivery. Direction and access point maps with site delivery rules and times will be sent out with each order.

Any abnormal loads to be delivered will be notified in advance to the Local Authorities/Police.

All deliveries to site will be scheduled by our site Logistics co-ordinator. All unscheduled or non-agreed deliveries will be turned away. A schedule of deliveries will be issued to the Highways Implementation Team by the logistics team when on site.

All gates on site open inwards and will not impede the public highway or footpaths at any time.

**Emergency Services**

Emergency services will be informed of access arrangements to site areas. Calling the services will be actioned in accordance with our site emergency procedures.

**Site Offices and welfare accommodation**

The site compound will be located as stated above within the site boundaries. Site office accommodation will be standard high security portable cabins and double stacked.

The site office set up will remain in this location for the majority of the project and will be removed to suit the external landscaping in this area.

WC facilities will be provided within the main office for staff and subcontractors with suitable drying rooms, canteen facilities.

**Liaison and good neighbour policy**

We pride ourselves on the good rapport we have established with a variety of different neighbouring parties on all of our construction schemes and aim to continue this at Doble Motorcycles. Our experience of construction within this type of environment has led us to develop an effective system to manage our activities in a proactive and consultative manner to avoid conflicts for the benefit of everyone involved.

Within our site management team, a single point of contact will be made at a suitable level of seniority to liaise with the local neighbours. Our Senior Project Manager will be the liaison contact point throughout the contract. He will have the ultimate responsibility on site and the necessary authority to direct operations.

Information will be distributed to the Neighbours on a regular basis to advise them of our planned operations and any impact they will have upon them.

**Protection of Third Parties**

All site activities are to be contained within the hoarding line and a comprehensive traffic management plan will be implemented to ensure no disruption is caused to traffic or pedestrians on the adjoining roads or walkways. Specific loading and unloading areas have been designated inside the site boundary.

Where construction or demolition works are to be carried out above any adjoining buildings, roads or pedestrian walkways and there is a risk of falling materials, monaflex sheeting or debris netting will be installed as a safety precaution.

**Systems to be operated in order to comply with the terms and conditions of any Local Authority planning consent**



**Sign boards**

The project signboard will be erected in accordance with the Client's wishes. The design of the board will be agreed with all parties before being erected.

**Hoardings**

The hoarding line will be shown on the site layout plan.

All boundaries of the project will be closed off using timber hoarding. All hoarding will be maintained and kept in good repair at all times.

**Pedestrian Access**

All footpaths and walkways surrounding the perimeter of the site boundary will remain unimpeded from construction activities at all times, except for any such emergency requiring the full evacuation from site and further such planned works for connections to utilities and forming new or closing off existing crossovers

In these instances we will provide alternative pedestrian access in accordance with the Street Works Act.

Signage will be provided at vehicular access points to the site and speed restriction and warning signage will be provided within the site to warn outgoing drivers of the need to be aware of pedestrians. At the main construction vehicle point the traffic manager will also assist large/long vehicles when entering or exiting the site.

**Working hours**

Our normal site working hours in keeping with the restrictions imposed by the local Environmental Health Officer will be as follows

**Monday - Friday 08.00 – 18.00**

**Saturday 08.00 – 13.00**

**Sundays and Bank Holidays Site closed**

Notwithstanding this there may be certain occasions when work outside these hours may be necessary. In the event of this, work would only be carried out following consultation and agreement with the Environmental Health Officer.

**Notifications**

During the Contractor mobilisation period, following award of contract and possession of the site, communication will be set up with the following authorities:-

- Notice will be served to the Health and Safety Executive
- Meeting with Building Control and Planning Authorities
- Meeting with local Environmental Health Officer
- Meeting with local Police and Fire Brigade
- Liaison with local residents and retail operators
- Notification to the emergency services giving full details of the construction works.
- Highways Authority
- Client to appoint Party Wall Surveyors

**Site surveys**

Before work starts, we will produce:-

- A dilapidation survey of adjoining properties, adjoining public roads and paths, illustrating their current state
- A plan and level survey of the construction area
- A survey of the existing surface and foul water system
- A survey of all trees to be retained
- An underground service survey (after demolition)
- An Environmental and Noise Survey

### **Rubbish removal, management and recycling**

An important part of the site management process involves site cleansing, rubbish removal and recycling.

We will produce a detailed Site Waste Management Plan.

This will include details of how we intend to reduce and manage site waste:

- The reuse of demolition waste on site. We will ensure that all material removed from site is taken to waste recycling stations and separated for recycling where possible. Records of the waste recycling will be provided by the recycling stations.
  - Enforcing good housekeeping measures e.g. proper storage of materials to minimise spillage.
  - The use of raw materials as per manufacturer's instructions.
  - Monitoring the generation of waste in order to identify trends and areas for further investigation.
  - Identifying recyclable and salvageable materials and where feasible find secondary or alternative uses.
  - Segregate waste types to facilitate recycling activities.
  - Working with suppliers / subcontractors to minimise surplus material delivered to site.
  - Working with suppliers to ensure only the necessary minimum of packaging is used.
  - Consideration of alternative materials with lower wastage levels.
  - Ensuring that all Duty Of Care and other legal requirements are complied with during the disposal of wastes.
  - Consulting with suppliers to determine correct / appropriate disposal routes for waste products and containers.
  - Assessing the project design to identify ways in which waste generation through raw material wastage and from temporary and permanent works activities can be avoided and minimised.
  - Setting waste reduction targets as well as educating and informing site staff.
  - Reducing usage of diesel, electricity and water on site by adopting good practices and management procedures
- General construction waste management will be provided by a package contractor who will be managed by our site logistics co-ordinator.
- Where gypsum plaster products are used the specialist contractors will be required to arrange recycling directly with the manufacturer.
- Data will be provided by the waste management contractor on the level of waste produced and the level to which this material has been recycled.
- It will be the responsibility of each section manager to keep the site area under his control safe from build up of rubbish.

### **Induction / Site rules /consultation**

Every person who enters the project will receive a specific project induction before they are allowed to leave the compound and commence work on site.

Inductions will provide an introduction to the project, a description of the project risks and a review of the individual's competency. Site Access passes will only be distributed following site induction. All site operatives and visitors will be inducted prior to commencement on site in a clearly defined facility without exception.

Our induction talks for operatives new to the site will include site rules which cover among other things:

- Behaviour toward others on site and nearby
- Drugs and alcohol
- Smoking areas
- PPE and safety issues

- Welfare facilities and use of
- Security issues
- Emergency procedures
- Good and bad practice

We will hold regular consultation meetings with the workforce to assess safety performance on site and review where can be improved, these will be open to all on site, in addition to this we will actively encourage the use of a 'comment box' so that site observations can be forwarded and actioned in a confidential manner.

We require regular 'tool box talks' to be undertaken and also all subcontractors to site operatives outlining a variety of relevant Health and Safety issues.

### **Health and Safety**

To minimise risk and control exposure, our Health, Safety and Environmental Department will give advice at planning stages on all activities and all H&S requirements.

These work by actively encouraging site operatives to think in a manner that assesses personal safety and the safety of others, not only on site but also throughout their lives.

The layout of the site accommodation ensures that all staff, visitors and operatives will have the ability to store and retrieve the correct PPE before entering the construction area.

### **First Aid**

The site will have First Aid attendance at all times.

### **Construction Activities**

The demolition and construction of the development will be carried out in accordance with detailed method statements and risk assessments approved by Ipos Ltd Site Management and in accordance with this construction management plan and Ipos Ltd Health and Safety Procedures.

### **Standards**

The project is to be carried out in accordance with the general principles of Health and Safety and Welfare as outlined in-

Health and Safety at work etc. Act 1974

The Management of Health and Safety at Work (amendment) Regulations 2006 Workplace (Health and Safety and Welfare) Regulations 1992.

Health and Safety (Display Screen Equipment) Regulations 1992

Personal Protective Equipment at Work Regulations 1992

Provision and Use of Work Equipment Regulations 1998

Manual Handling Operations Regulations 1992

Health and Safety (First Aid) Regulations 1981

The Health and Safety Information for Employers (amendment) Regulations 2009

Employers Liability (Compulsory Insurance) Regulations 1998

Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR)

The Control of Noise at Work Regulations 2005

The Control of Vibration at work regulations 2005

Electricity at Work Regulations 1989

Control of substances Hazardous to Health Regulations 2004 (COSHH)

Construction (Design and Management) Regulations 2007

Gas Safety (Installation and Use) Regulation 1998.

Control of Major Accident Hazards (Amendment) Regulations 2005

Chemicals (Hazard Information and Packaging for Supply) Regulations 2009

Dangerous Substances and Explosive Atmospheres Regulations 2002

Work at Height Regulations 2005

## **SELECTION PROCEDURES**

### **Sub – Contractors**

The names of all sub-contractors to be employed on the contract are to be notified to the CDM Coordinator well in advance of their employment. The contractor employing such sub-contractor should at the same time provide sufficient information to show the competence of the sub-contractor for the work on which they are being engaged together with any details that are required to ensure provision for health and safety.

Details may include:-

- Experience
- Membership of Profession or Trade organisation.
- Training – Specialist Training/Construction Skills card
- Health and Safety – Approved H&S Training
- Health and Safety Statement
- Method Statement if relevant
- EL/PI Insurance

## **MATERIALS**

Suppliers of any materials to the project must provide adequate health and safety information to support their products to the Contractor. Details may include

- Material Safety data sheets
- Conformity to National or European standards.
- Manufacturers or suppliers data sheet ( quality/use)

NOTE COSHH assessments will be carried out by the Contractor and will be attached to the Method Statement for specific specialist works.

## **MACHINERY AND PLANT**

Machinery and plant used on the site must be properly selected, used and maintained and the contractor will only allow operation of such plant and machinery by operator who has adequate training /experience in such use. Documents evidence regarding training should be supplied to the Health and Safety coordinator when any new plant operator first arrives at the site. Details may include:-

- Proof of age ( where applicable)
- Driving licence
- Plant operator awareness training certificates
- Experience
- Health and Safety – Approved H&S Training

Machinery and plant must have relevant up to date Test Certificates. Such certificates will be filed in site Health and Safety File.

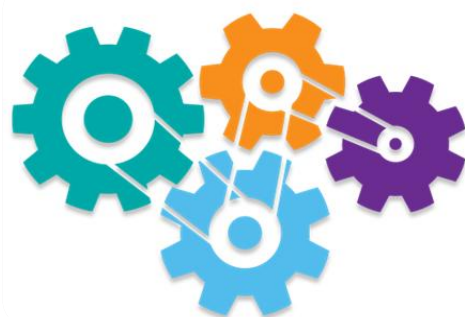
## **COMMUNICATIONS AND CO-OPERATION**

To facilitate communications between the client, the H&S Advisor to the Client during Works, the contractor and sub-contractors , regular meetings will be held on site as necessary.

- 1) If any time sub-contractor is appointed and the project supervisor considers the sub-contractor will either be a risk or may create a risk then a further meeting will be held on site that will be attended by the health and safety co-ordinator, contractor, and the relevant sub-contractors.
- 2) A final meeting shall be held on site between the members of the full project team when the work is completed to assess any outstanding problems and to identify any hazards, which should be mentioned in the safety file.
- 3) The Principal Contractor shall:
  - (a) Coordinate arrangements among contractors to ensure the provision of relevant information, in writing, necessary for the H&S Advisor to the Client during works to complete the Safety File, monitor the implementation of the arrangements taking any necessary corrective action.



Daylight, Sunlight &  
Overshadowing  
Report



399

Tottenham  
High Road,  
London,  
N17 6QN

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December  
2014

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Ref: 14-1187

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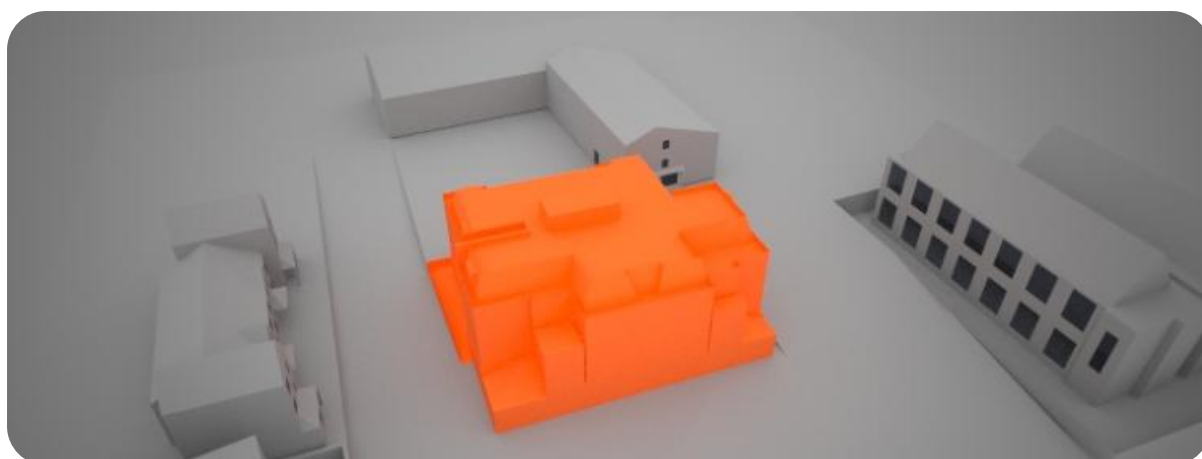


## Quality Standards Control

The signatories below verify that this document has been prepared in accordance with our quality control requirements. These procedures do not affect the content and views expressed by the originator.

This document must only be treated as a draft unless it has been signed by the originators and approved by a director.

DATE	PRODUCED BY	APPROVED BY
18/12/2014	DC	AWK



Revision	
Date	
Prepared by	
Checked by	
Authorised by	

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The conclusions and recommendations contained in this report are based upon information provided by others and upon the assumption that all relevant information has been provided by those parties from whom it has been requested and that such information is accurate. Information obtained by SC has not been independently verified by SC, unless otherwise stated in the report.

The methodology adopted and the sources of information used by SC in providing its services are outlined in this report. The work described in this report was undertaken in **December 2014** and is based on the conditions encountered and the information available during the said period of time. The scope of this report and the services are accordingly factually limited by these circumstances.

Where assessments of works or costs identified in this report are made, such assessments are based upon the information available at the time and where appropriate are subject to further investigations or information which may become available.

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Costs may vary outside the ranges quoted. Whilst cost estimates are provided for individual issues in this report these are based upon information at the time which can be incomplete. Cost estimates for such issues may therefore vary from those provided. Where costs are supplied, these estimates should be considered in aggregate only. No reliance should be made in relation to any division of aggregate costs, including in relation to any issue, site or other subdivision.

No allowance has been made for changes in prices or exchange rates or changes in any other conditions which may result in price fluctuations in the future. Where assessments of works or costs necessary to achieve compliance have been made, these are based upon measures which, in SC's experience, could normally be negotiated with the relevant authorities under present legislation and enforcement practice, assuming a pro-active and reasonable approach by site management.

Forecast cost estimates do not include such costs associated with any negotiations, appeals or other non-technical actions associated with the agreement on measures to meet the requirements of the authorities, nor are potential business loss and interruption costs considered that may be incurred as part of any technical measures.

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## 1. Executive summary

This report demonstrates the impact of the proposed development **on the surrounding buildings and amenity areas/gardens/open spaces.**

The results of the assessment show that in terms of:

- Daylight, **none of the residential surrounding buildings (at 6-11 Library Court, at 1 to 53 Nicholson Court and at 413 High Road)** will be adversely impacted by the proposed development.

The BRE criteria are met: ☒

- Sunlight, **none of the residential surrounding buildings (at 6-11 Library Court, at 1 to 53 Nicholson Court and at 413 High Road)** will be adversely impacted by the proposed development.

The BRE criteria are met: ☒

- Overshadowing, **the existing amenity area/garden/open space located at Nicholson Court** will not be impacted by the proposed development.

The BRE criteria are met: ☒

On balance, it can be concluded that the surrounding buildings (at 6-11 Library Court, at 1 to 53 Nicholson Court and at 413 High Road) will not be adversely impacted by the proposed development.

→ **The proposed scheme is acceptable.**

## 2. Introduction

This report has been prepared to support the planning application for the proposed development at 399 High Road, London N17 6 QN. The existing site will be demolished and the proposed scheme is comprising of circa 18 flats and a commercial space. The report assesses the daylight, sunlight and overshadowing effect of the proposed development on the surrounding buildings and specifically focuses on the windows of the residential buildings at 6-11 Library Court, at 1 to 53 Nicholson Court and at 413 High Road. The assessment is undertaken in accordance with **"BRE 209 Digest: Site Layout Planning For Daylight and Sunlight – A Guide to Good Practice"**.

The existing & proposed drawings (in AutoCAD format) of the project were provided by **Ada Architects** on the **08<sup>th</sup> December 2014** and have been used in preparing this report.

The study has been undertaken by constructing a 3D IES model of the existing and proposed site and surrounding buildings in order to analyse the daylight, sunlight and overshadowing impact of the new development on the affected buildings. All images used in this report are technical 3D models created using 2D AutoCAD Drawings (floor plans, sections and elevations) and not 3D visualisation images.

### 3. Planning policy

Where the proposed development has the potential to negatively impact the existing levels of daylight or sunlight on neighbouring properties, a daylight and sunlight assessment has to accompany the planning application.

The daylight and sunlight assessment includes the necessary information to meet the criteria outlined in the Site layout planning for daylight and sunlight: a guide to good practice published by the Building Research Establishment (BRE).

### 4. Guidance document

#### 4.1. Building Research Establishment (BRE) report (BRE 209): "Site layout planning for daylight and sunlight: A guide to good practice" Second Edition (2011)

The Second Edition of the report replaces the 1991 document of the same name and came into effect from October 2011.

It is important to note that the introduction to the report stresses that the document is provided for guidance purposes only and it is not intended to be interpreted as a strict and rigid set of rules. It also recommends that it may be appropriate to adopt a flexible approach and alternative target values in dealing with "special circumstances" for example "in a historic city centre, or in an area with modern high-rise buildings, a higher degree of obstruction may be unavoidable if new developments are to match the height and proportions of existing buildings". This is amplified by the following extracts from the introduction (p1, para. 6) and Section 2.2:

*"The advice given here is not mandatory and this document should not be seen as an instrument of planning policy; its aim is to help rather than constrain the designer. Although it gives numerical guidelines, these should be interpreted flexibly because natural lighting is only one of many factors in site layout design". (p1, para. 1.6)*

*"In special circumstances the Developer or Planning Authority may wish to use different target values". (p1, para. 1.6)*

*"Note that numerical values given here are purely advisory. Different criteria may be used, based upon the requirements for daylight in an area viewed against other site layout constraints. Another important issue is whether the existing building is itself a good neighbour, standing a reasonable distance from the boundary and taking no more than its fair share of light". (p7 para. 2.2.3)*

The examples given in the report can be applied to any part of the country: suburban, urban and rural areas. The inflexible application of the target values given in the report may make reaching the BRE criteria difficult in a tight, urban environment where there is unlikely to be the same expectation of daylight and sunlight amenity as in a suburban or rural environment.



## 5. Assessment methodology

### 5.1. General

When assessing any potential effects on the surrounding properties, the BRE guidelines suggest that only those windows that have a reasonable expectation of daylight or sunlight need be assessed. In particular the BRE guidelines at paragraph 2.2.2 state:

*"The guidelines given here are intended for use for rooms in adjoining dwellings where daylight is required, including living rooms, kitchens and bedrooms. Windows to bathrooms, toilets, storerooms, circulation areas and garages need not be analysed. The guidelines may also be applied to any existing non-domestic buildings where the occupants have a reasonable expectation of daylight; this would normally include schools, hospitals, hotels and hostels, small workshops and some offices."*

Further to the above statement, it is considered that the vast majority of commercial properties do not have a reasonable expectation of daylight or sunlight. This is because they are generally designed to rely on electric lighting rather than natural daylight or sunlight.

This report assesses the potential impact of the proposed development in relation to daylight, sunlight and overshadowing on the buildings at 6-11 Library Court, at 1 to 53 Nicholson Court and at 413 High Road. Specifically, it takes into consideration the possible effect and influence that the new development would have on the properties.

36 target surfaces (S1 to S36) for external levels of daylight VSCs (Vertical Sky Components) and sunlight availability, as shown in section 9.4 in Appendix, have been selected based on anticipated worse case impact judged from professional experience and also following guidance within the BRE guidelines "Site layout planning for daylight and sunlight".

One existing amenity areas/gardens/open spaces have been identified on the drawings and/or site plan at Nicholson Court.

The IES Virtual Environment modelling software utilised for the compilation of this report has been accredited by CIBSE and acknowledged by the BRE as a suitable software tool for undertaking daylight, sunlight and overshadowing assessments in accordance with the BRE Good Practice guidelines. The specific IES software modules utilised for this assessment are the following:

- ☐ ModelIT: enables you to create a 3D "Virtual Environment" model without CAD data, or alternatively allows you to create a 3D model from 2D CAD data. Interfaces with AutoCAD and Google Sketchup.
- ☐ Radiance: is a detailed 3D simulation tool designed to predict daylight and electric light levels, and the appearance of a space prior to construction. Vertical Sky Components (VSC) and Average Daylight Factors (ADF) can be simulated using Radiance.
- ☐ SunCast: produces visual, graphical and numerical information that can be used to explain to colleagues, clients and planning authorities how the sun impacts on and inside the building, and on the site.

If a property is considered to have a reasonable expectation of daylight or sunlight the following methodology to assess the impacts has been used.

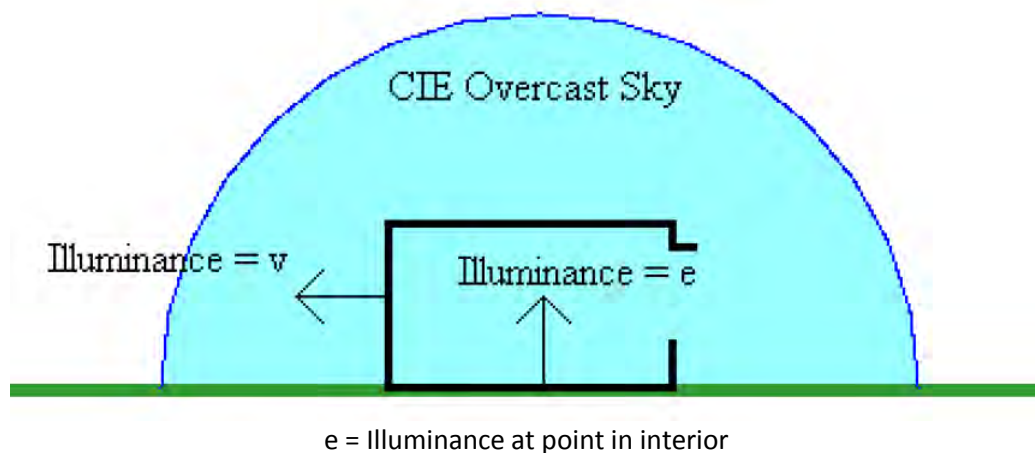
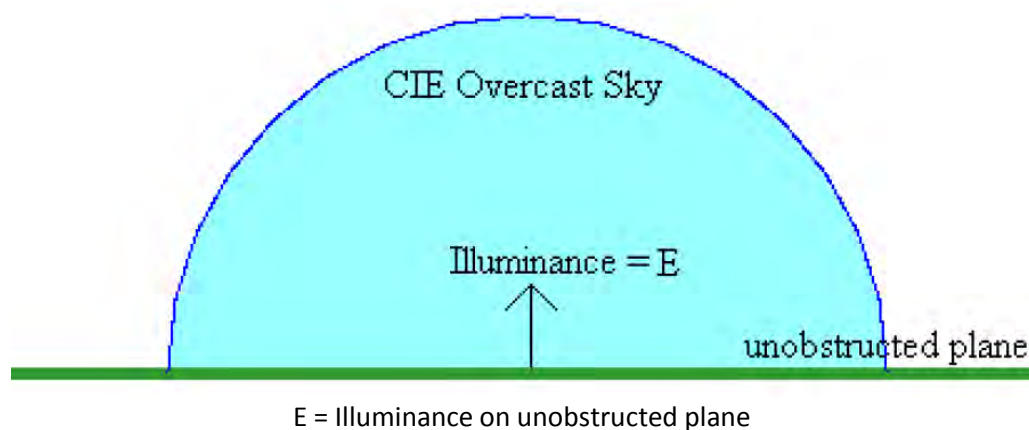
## 5.2. BRE Digest 209: "Site layout planning for daylight and sunlight"

This section provides a brief description of the calculating methods for the daylight, sunlight and overshadowing to gardens and open spaces criteria presented in BRE Digest 209.

### 5.2.1. Daylight

The BRE guidelines "Site layout planning for daylight and sunlight" incorporate two main methods of calculating daylight: the Vertical Sky Component (VSC) method and the Average Daylight Factor (ADF) method.

The VSC method measures the amount of light available on the outside plane at the centre of a window, as a ratio (expressed as a percentage) of the amount of total unobstructed sky visible following the introduction of visible barriers such as buildings.



Sky component =  $e/E$  (often expressed as a percentage %)

Vertical Sky Component (VSC) =  $v/E$  %

In this assessment, VSC is selected and more details on the numerical criteria for the VSC method are presented in section 9.6.

### 5.2.2. Sunlight

The BRE guidelines "Site layout planning for daylight and sunlight" recommend that access to sunlight is assessed with a development proposal. Potential impacts on available sunlight were assessed using the BRE's Annual Probable Sunlight Hours (APSH) method. This method involves the forecasting of sunlight availability throughout the year and in the winter months, for the main window of each habitable room that faces within 90° of due south. The buildings surrounding the site that do not contain windows that face within 90° of due south has been excluded from the sunlight assessment.

To provide a concise and comprehensive indicative analysis, the closest surfaces within the surrounding properties were analysed for both daylight and sunlight. Their locations are shown in section 9.4.1 in Appendix.

More details on the numerical criteria for the APSH method are presented in section 9.7.

### 5.2.3. Overshadowing to gardens and open spaces

The BRE guidelines "Site layout planning for daylight and sunlight" provide sunlight availability criteria for open spaces. In particular it gives guidance for calculating any areas of open space that may be in permanent shadow on 21<sup>st</sup> March.

In summary the BRE document states:

*"It is suggested that, for it to appear adequately sunlit throughout the year, at least half of a garden or amenity area should receive at least two hours of sunlight on 21<sup>st</sup> March. If as a result of new development, an existing garden or amenity area does not meet these guidelines, and the area which can receive two hours of sun on 21<sup>st</sup> March is less than 0.8 times its former value, then the loss of sunlight is likely to be noticeable".*

For this assessment the IES "Virtual Environment" SunCast software package has been used. A 3D model of the proposed and surrounding buildings was first modelled and the sunlight-tracking feature within the software used to view the shadow results. The study illustrated the extent of the shadow on one key date:

- March 21 (Spring Equinox)

More details on the numerical criteria for the overshadowing method are presented in section 9.8.



## 6. BRE Digest 209: Significant criteria

### 6.1. Daylight

The daylight criteria given within the BRE guidelines have been used as a basis to assess the potential impacts of the development:

*"The daylighting is not considered to be substantially affected when the Vertical Sky Component (VSC) measured at the centre of a window is >27%. A window may be adversely affected if the VSC measured at the centre of the window is less than 27% and less than 0.8 times its former value".*

In the assessment, the reduction between existing and proposed situations is expressed as a percentage, where a change in daylight levels above 20% equates to a figure of less than 0.8 times its former value.

Assessment points that do not meet the above criteria require further considerations to show the level of impact likely to be incurred.

### 6.2. Sunlight

The sunlight criteria given within the BRE guidelines have been used as a basis to assess the potential impacts of the development:

*"A window may be adversely affected if a point at the centre of the window receives in the year less than 25% of the Annual Probable Sunlight Hours (APSH) including at least 5% of the APSH during the winter months (21<sup>st</sup> October to 21<sup>st</sup> March)".*

Assessment points that do not meet the above criteria require further considerations to show the level of impact likely to be incurred.

### 6.3. Overshadowing to gardens and open spaces

The sunlight criteria given within the BRE guidelines have been used as a basis to assess the potential impacts of the development:

*"It is suggested that, for it to appear adequately sunlit throughout the year, at least half of a garden or amenity area should receive at least two hours of sunlight on 21<sup>st</sup> March. If as a result of new development, an existing garden or amenity area does not meet these guidelines, and the area which can receive two hours of sun on 21<sup>st</sup> March is less than 0.8 times its former value, then the loss of sunlight is likely to be noticeable".*

Assessment points that do not meet the above criteria require further considerations to show the level of impact likely to be incurred.

#### 6.4. Criteria for assessing daylight, sunlight and overshadowing effects

The table 1 is a summary of the criteria to assess daylight, sunlight and overshadowing impacts:

Magnitude of effect	Criteria		
<b>Beneficial</b>	An improvement ratio > 1.3 of the baseline value		
<b>Negligible</b>	Daylight	Sunlight	Overshadowing
	A VSC of 27% or above in the proposed scenario with adequate daylight distribution	An APSH of 25%, of which 5% are in the winter months	50% of any amenity areas receiving at least 2 hours of direct sunlight on 21 <sup>st</sup> March
	Or	Or	Or
	A reduction ratio <1.0 and ≥ 0.8 of the baseline value	A reduction ratio <1.0 and ≥ 0.8 of the baseline value	A reduction ratio <1.0 and ≥ 0.8 of the baseline value
<b>Minor adverse</b>	A reduction ratio <0.8 and ≥ 0.7 of the baseline value		
<b>Moderate adverse</b>	A reduction ratio <0.7 and ≥ 0.6 of the baseline value		
<b>Major adverse</b>	A reduction ratio <0.6 of the baseline value		

*Table 1: Criteria for assessing daylight, sunlight and overshadowing effects*

Please note that in terms of daylight and sunlight BRE considers that a reduction in daylight or sunlight of less than 20% is not likely to be materially noticeable to occupiers of buildings. Our report then uses 10% increments of exceedance above the relevant threshold to be able to make the difference between minor, moderate and major adverse impact.

## 7. Assessment

### 7.1. BS 8206-2: 1992

The foreword to BS 8206-2: 1992 states that:

*“The aim of the standard is to give guidance to architects, builders and others who carry out lighting design. It is recognised that lighting is only one of many matters that influence fenestration. These include other aspects of environmental performance (such as noise, thermal equilibrium and the control of energy use), fire hazards, constructional requirements, the external appearance and the surroundings of the site. The best design for a building does not necessarily incorporate the ideal solution for any individual function. For this reason, careful judgement should be exercised when using the criteria given in the standards for other purposes, particularly town planning control.”*

### 7.2. Daylight

The daylight results are presented in section 9.6 in Appendix. The images and results show and compare the external levels of daylight (VSC – Vertical Sky Components) on the surfaces of 6-11 Library Court, at 1 to 53 Nicholson Court and at 413 High Road with and without the proposed development.

A summary of results is displayed in the table 2 below:

Building Target surface	Daylight assessment (Surrounding buildings)		Ratio	Result
	VSC (existing) >27%	VSC (proposed) >27%		
Surface 1 - 6 Library Court - GF	33.91	30.29	0.89	Negligible
Surface 2 - 6 Library Court - FF	36.47	33.65	0.92	Negligible
Surface 3 - 6 Library Court - FF	36.46	33.14	0.91	Negligible
Surface 4 - 6 Library Court - SF	38.04	35.86	0.94	Negligible
Surface 5 - 6 Library Court - SF	38.07	35.58	0.93	Negligible
Surface 6 - 7 Library Court - GF	26.85	22.87	0.85	Negligible
Surface 7 - 7 Library Court - FF	30.87	27.49	0.89	Negligible
Surface 8 - 7 Library Court - FF	35.82	32.25	0.90	Negligible
Surface 9 - 8 Library court - GF	33.36	29.24	0.88	Negligible
Surface 10 - 8 Library Court - FF	36.34	32.76	0.90	Negligible
Surface 11 – 8 Library Court - FF	36.50	33.00	0.90	Negligible
Surface 12 - 9 Library Court - GF	33.13	29.32	0.88	Negligible
Surface 13 - 9 Library Court - FF	36.49	33.19	0.91	Negligible

Surface 14 - 9 Library Court - FF	36.42	33.42	0.92	Negligible
Surface 15 - 10 Library Court - GF	27.96	25.36	0.91	Negligible
Surface 16 - 10 Library Court - FF	35.97	33.29	0.93	Negligible
Surface 17 - 10 Library Court - FF	31.67	29.42	0.93	Negligible
Surface 18 - 11 Library Court - GF	34.88	32.46	0.93	Negligible
Surface 19 - 11 Library Court - FF	36.74	34.67	0.94	Negligible
Surface 20 - 11 Library Court - FF	36.72	34.96	0.95	Negligible
Surface 21 - 11 Library Court - SF	38.07	36.69	0.96	Negligible
Surface 22 - 11 Library Court - SF	38.06	36.89	0.97	Negligible
Surface 23 - 1 to 53 Nicholson Court - GF	35.64	33.62	0.94	Negligible
Surface 24 - 1 to 53 Nicholson Court - GF	35.71	32.69	0.92	Negligible
Surface 25 - 1 to 53 Nicholson Court - GF	35.21	30.47	0.87	Negligible
Surface 26 - 1 to 53 Nicholson Court - GF	23.25	16.06	0.69	Moderate
Surface 27 - 1 to 53 Nicholson Court - GF	29.75	24.47	0.82	Negligible
Surface 28 - 1 to 53 Nicholson Court - FF	36.14	31.49	0.87	Negligible
Surface 29 - 1 to 53 Nicholson Court - SF	37.69	34.64	0.92	Negligible
Surface 30 - 413 High Road - GF	33.86	31.75	0.94	Negligible
Surface 31 - High Road 413 - GF	34.41	32.24	0.94	Negligible
Surface 32 - High Road 413 - GF	34.88	32.83	0.94	Negligible
Surface 33 - High Road 413 - GF	35.42	33.65	0.95	Negligible
Surface 34 - High Road 413 - GF	36.30	34.87	0.96	Negligible
Surface 35 - High Road 413 - GF	36.60	35.46	0.97	Negligible
Surface 36 - High Road 413 - GF	36.64	35.72	0.98	Negligible

**Table 2: Daylight results**

*Note: For location of target surfaces, see Appendix section 9.4 "Site plan and location"*

As can be seen in the above table, only one of the surfaces will be adversely impacted by the proposed development.



As mentioned in the BRE guide *"The guidelines given here are intended for use for rooms in adjoining dwellings where daylight is required, including living rooms, kitchens and bedrooms. Windows to bathrooms, toilets, storerooms, circulation areas and garages need not be analysed. The guidelines may also be applied to any existing non-domestic buildings where the occupants have a reasonable expectation of daylight; this would normally include schools, hospitals, hotels and hostels, small workshops and some offices."*

- **Further to the above statement, it is considered that the vast majority of commercial properties do not have a reasonable expectation of daylight or sunlight. This is because they are generally designed to rely on electric lighting rather than natural daylight or sunlight.**

Surface 26: As the window appears to belong to non-habitable room it can be considered that the adverse impact on this window is negligible. Please refer to the photo below.



**Nicholson Court - Surface 26 - GF**

- ✓ **The slight loss in daylight for the surfaces is not considered of concern as the proposed VSC levels are either above 27% or more than 0.8 times their former values and will provide adequate levels of daylight.**

→ **In terms of daylight the proposed scheme is considered acceptable.**

It should be noted that the values provided in the BRE 209 are for guidance purposes only.

### 7.3. Sunlight

Where necessary (as defined in the Assessment Methodology section of this report) Annual Probable Sunlight Hours (APSH) tests have been undertaken with the results presented in section 9.7 in the appendix.

The table below indicates the likely levels of sunlight on the surfaces of 6-11 Library Court, at 1 to 53 Nicholson Court and at 413 High Road with and without the proposed development.

A summary of results is displayed in the table 3 below:

Building Target surface	Sunlight assessment (Surrounding buildings)		Total APSH >25%		Winter APSH >5%		Ratio Annual	Ratio Winter	Result
	Existing	Proposed	Existing	Proposed	Existing	Proposed			
Surface 1 - 6 Library Court - GF	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Surface 2 - 6 Library Court - FF	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Surface 3 - 6 Library Court - FF	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Surface 4 - 6 Library Court - SF	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Surface 5 - 6 Library Court - SF	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Surface 6 - 7 Library Court - GF	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Surface 7 - 7 Library Court - FF	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Surface 8 - 7 Library Court - FF	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Surface 9 - 8 Library court - GF	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Surface 10 - 8 Library Court - FF	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Surface 11 - 8 Library Court - FF	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Surface 12 - 9 Library Court - GF	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Surface 13 - 9 Library Court - FF	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Surface 14 - 9 Library Court - FF	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Surface 15 - 10 Library Court - GF	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Surface 16 - 10 Library Court - FF	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Surface 17 - 10 Library Court - FF	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Surface 18 - 11 Library Court - GF	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Surface 19 - 11 Library Court - FF	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Surface 20 - 11 Library Court - FF	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Surface 21 - 11 Library Court - SF	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Surface 22 - 11 Library Court - SF	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Surface 23 - 1 to 53 Nicholson Court - GF	80	75	24	22	0.94	0.92	N/A
Surface 24 - 1 to 53 Nicholson Court - GF	81	69	25	22	0.85	0.88	N/A
Surface 25 - 1 to 53 Nicholson Court - GF	80	65	25	21	0.81	0.84	N/A
Surface 26 - 1 to 53 Nicholson Court - GF	28	12	7	2	0.43	0.29	Major adverse
Surface 27 - 1 to 53 Nicholson Court - GF	36	25	8	3	0.69	0.38	Moderate - Major adverse
Surface 28 - 1 to 53 Nicholson Court - FF	46	38	11	6	0.83	0.55	Negligible
Surface 29 - 1 to 53 Nicholson Court - SF	47	47	12	12	1	1	Negligible
Surface 30 - 413 High Road - GF	81.	78	24	21	0.96	0.88	Negligible
Surface 31 - High Road 413 - GF	81	78	24	21	0.96	0.88	Negligible
Surface 32 - High Road 413 - GF	83	79	26	22	0.95	0.85	Negligible
Surface 33 - High Road 413 - GF	84	81	27	24	0.96	0.89	Negligible
Surface 34 - High Road 413 - GF	82	79	26	23	0.96	0.88	Negligible
Surface 35 - High Road 413 - GF	83	81	27	25	0.98	0.93	Negligible
Surface 36 - High Road 413 - GF	82	80	28	26	0.98	0.93	Negligible

Table 3: Sunlight results

Note: For location of target surfaces, see Appendix section 9.4 "Site plan and location"

The table above demonstrates that, two of the surfaces (26 – 27) will be adversely impacted by the proposed development.

N/A: Not applicable. The buildings surrounding or adjacent to the site that do not contain windows within 90° of due South have been excluded from the sunlight assessments. This is because sunlight is directional and North-facing windows in this location will only receive sunlight at the height of summer at occasional times. As such, pursuant to the BRE guide, North-facing windows are not considered to have a reasonable expectation of sunlight and do not require assessment.

As mentioned in the BRE guide *"The guidelines given here are intended for use for rooms in adjoining dwellings where daylight is required, including living rooms, kitchens and bedrooms. Windows to bathrooms, toilets, storerooms, circulation areas and garages need not be analysed. The guidelines may also be applied to any existing non-domestic buildings where the occupants have a reasonable expectation of daylight; this would normally include schools, hospitals, hotels and hostels, small workshops and some offices."*



- Further to the above statement, it is considered that the vast majority of commercial properties do not have a reasonable expectation of daylight or sunlight. This is because they are generally designed to rely on electric lighting rather than natural daylight or sunlight.

Surface 26 and 27: As the windows appear to belong to non-habitable rooms it can be considered that the adverse impact on this window is negligible. Please refer to the photo below.



**Nicholson Court - Surface 26 and 27 - GF**

- ✓ The slight loss in sunlight for the surfaces is not considered of concern as the proposed total APSH are either above >25% of which more than 5% are in winter months or are more than 0.8 times their former values.
- In terms of sunlight the proposed scheme is considered acceptable.

It should be noted that the values provided in the BRE 209 are for guidance purposes only.



## 7.4. Overshadowing

The following results represent the cumulative overshadowing impacts of the proposed development. As identified from the AutoCAD drawings and/or site plan, one existing amenity area is located at Nicholson Court. In accordance with the BRE guidelines, overshadowing has been assessed during times of the day where the sun's altitude is above 10° (from 7:30am to 5:00pm).

*"It is suggested that, for it to appear adequately sunlit throughout the year, at least half of a garden or amenity area should receive at least two hours of sunlight on 21<sup>st</sup> March. If as a result of new development, an existing garden or amenity area does not meet these guidelines, and the area which can receive two hours of sun on 21<sup>st</sup> March is less than 0.8 times its former value, then the loss of sunlight is likely to be noticeable".*

The pictures showing the overshadowing impact are indicated in section 9.8 of the Appendix.

A summary of results is displayed in the table 4 below:

Overshadowing assessment from 7.30am to 5.00pm				
% of area receiving sunlight on 21 <sup>st</sup> March				
Amenity area	Existing (%)	Proposed (%)	Ratio	Result
A1 - Nicholson Court	66.47	62.53	0.94	Negligible

Table 4: Overshadowing results

Note: For location of target surfaces, see Appendix section 9.4 "Site plan and location"

As can be seen in the table above, the existing amenity area/garden/open space will not be impacted by the proposed development.

→ In terms of overshadowing the proposed scheme is considered acceptable.

It should be noted that the values provided in the BRE 209 are for guidance purposes only.

## 8. Conclusion

### 8.1. Daylight

This report demonstrates that the levels of daylight at the surrounding buildings (6-11 Library Court, at 1 to 53 Nicholson Court and at 413 High Road) are adequate.

**BRE criteria met:** ☒

### 8.2. Sunlight

This report demonstrates that the levels of sunlight at the surrounding buildings (6-11 Library Court, at 1 to 53 Nicholson Court and at 413 High Road) are adequate.

**BRE criteria met:** ☒

### 8.3. Overshadowing

This report demonstrates that the existing amenity areas/gardens/open spaces located at Nicholson Court will not be adversely impacted by the proposed development.

**BRE criteria met:** ☒

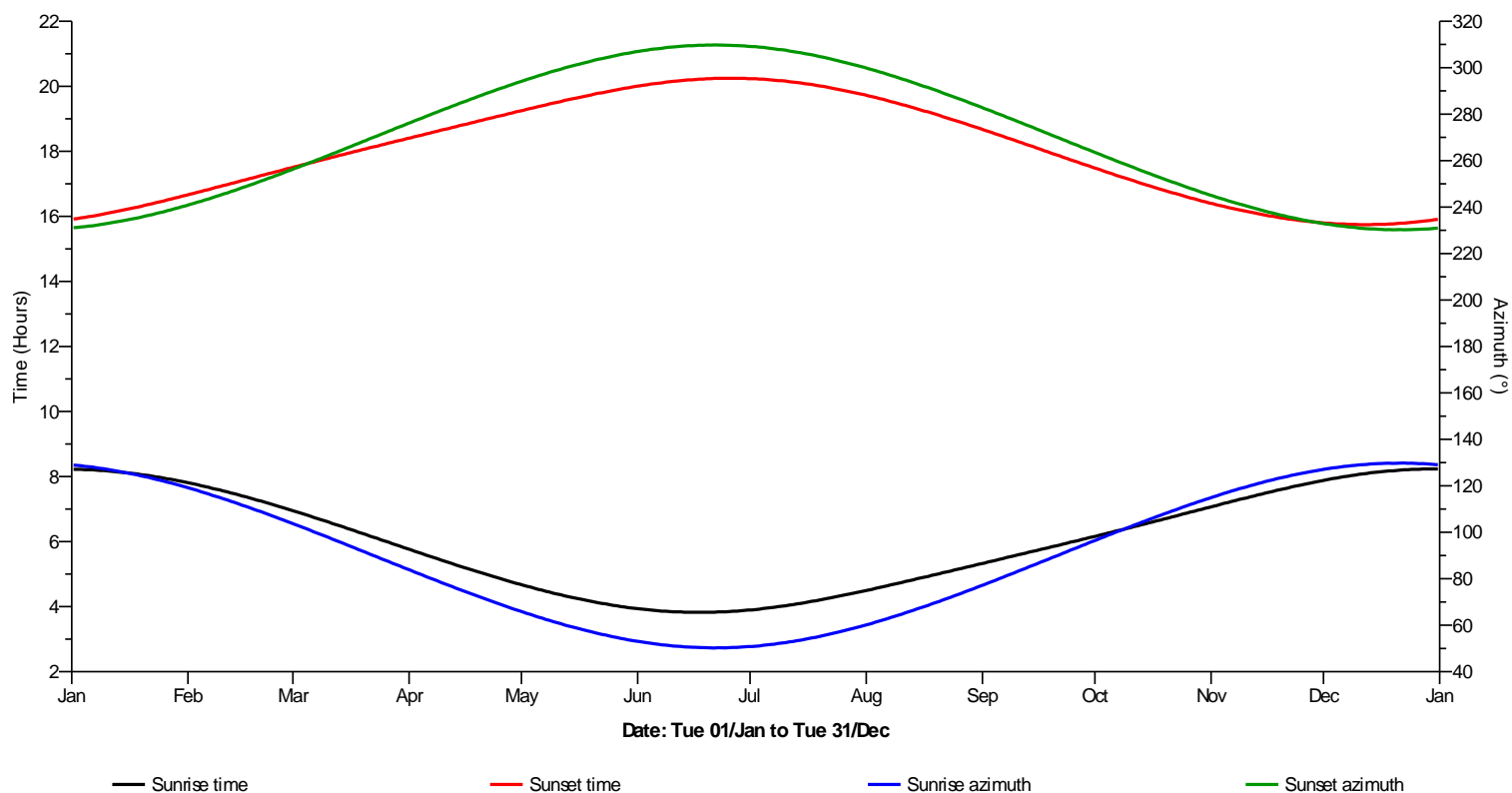
On balance, it can be concluded that the surrounding buildings (at 6-11 Library Court, at 1 to 53 Nicholson Court and at 413 High Road) will not be adversely impacted by the proposed development.



**The proposed scheme is acceptable.**

## 9. Appendix

### 9.1. Sunrise and sunset time



### 9.2. Sun path

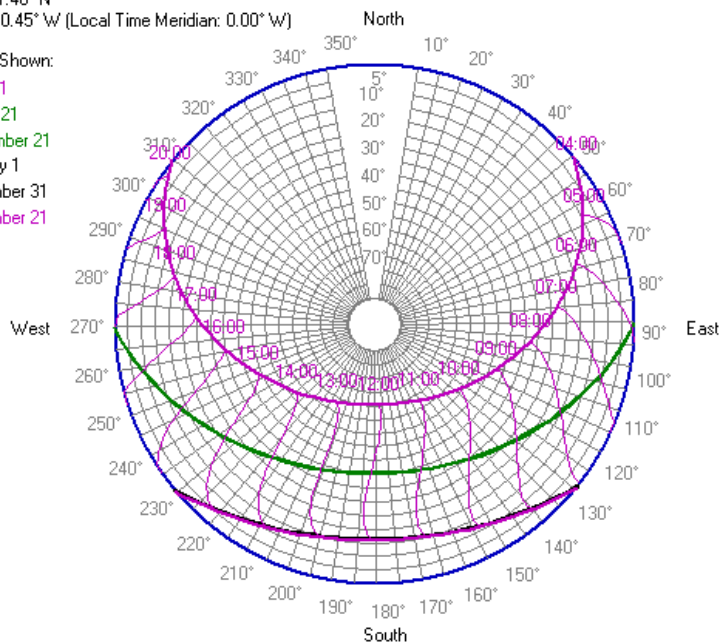
Location: London/Heathrow

Latitude: 51.48° N

Longitude: 0.45° W (Local Time Meridian: 0.00° W)

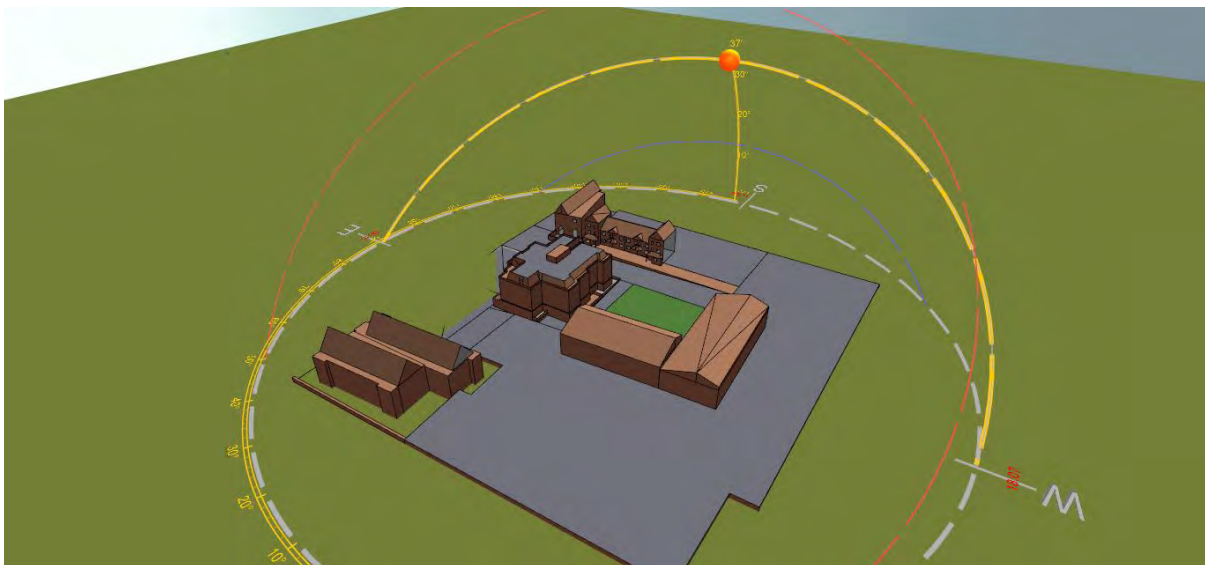
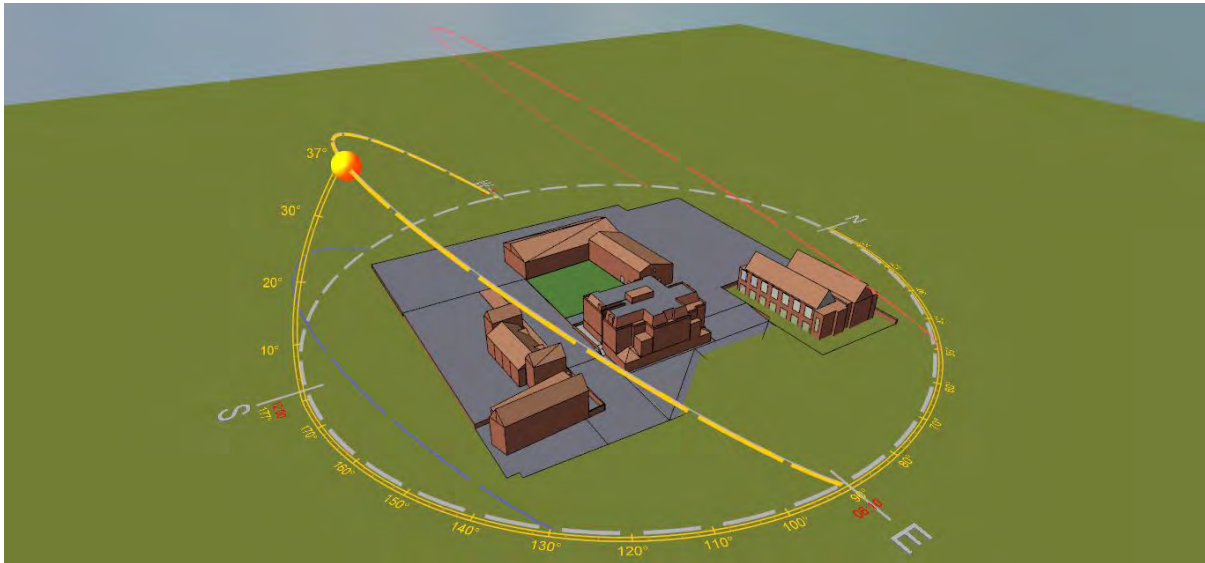
Sun Paths Shown:

- June 21
- March 21
- September 21
- January 1
- December 31
- December 21



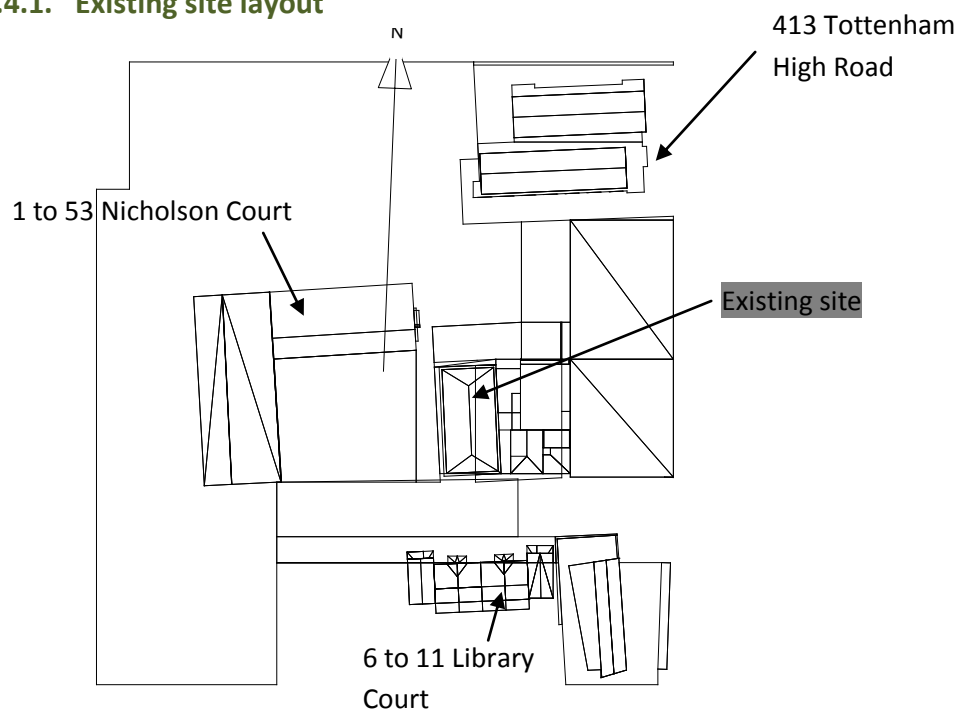
### 9.3. Suntrace

- ❖ The red line represents the sun's path during June.
- ❖ The yellow line represents the sun's path during March/September.
- ❖ The blue line represents the sun's path during December.

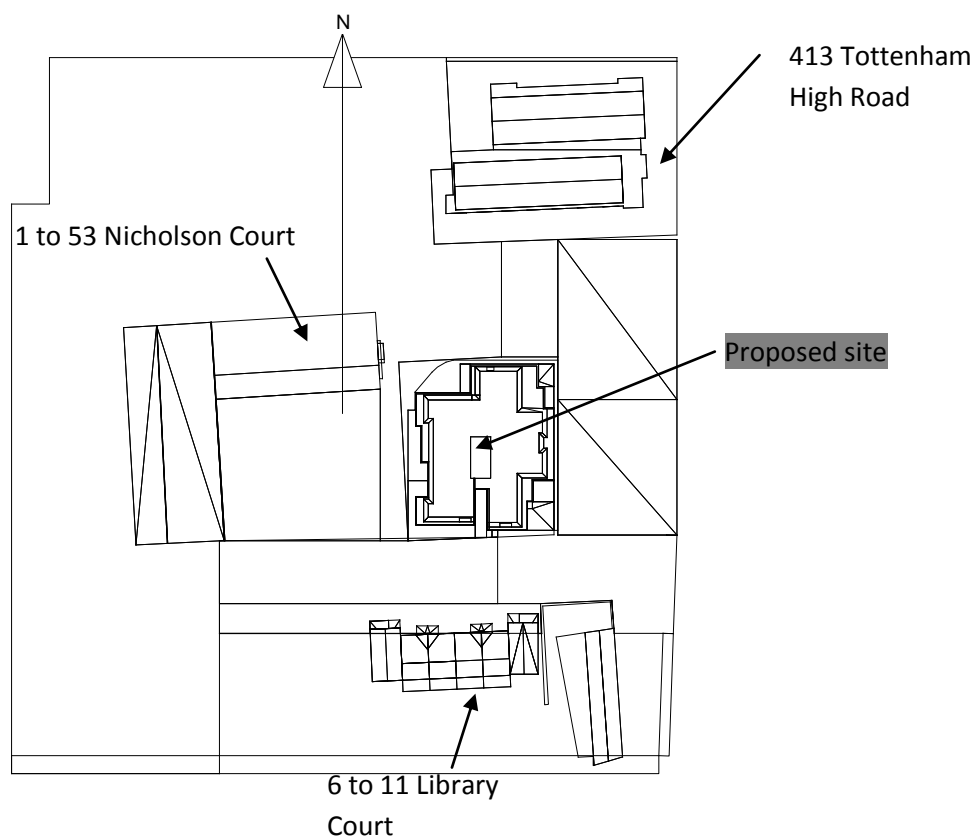


## 9.4. Site plan and location

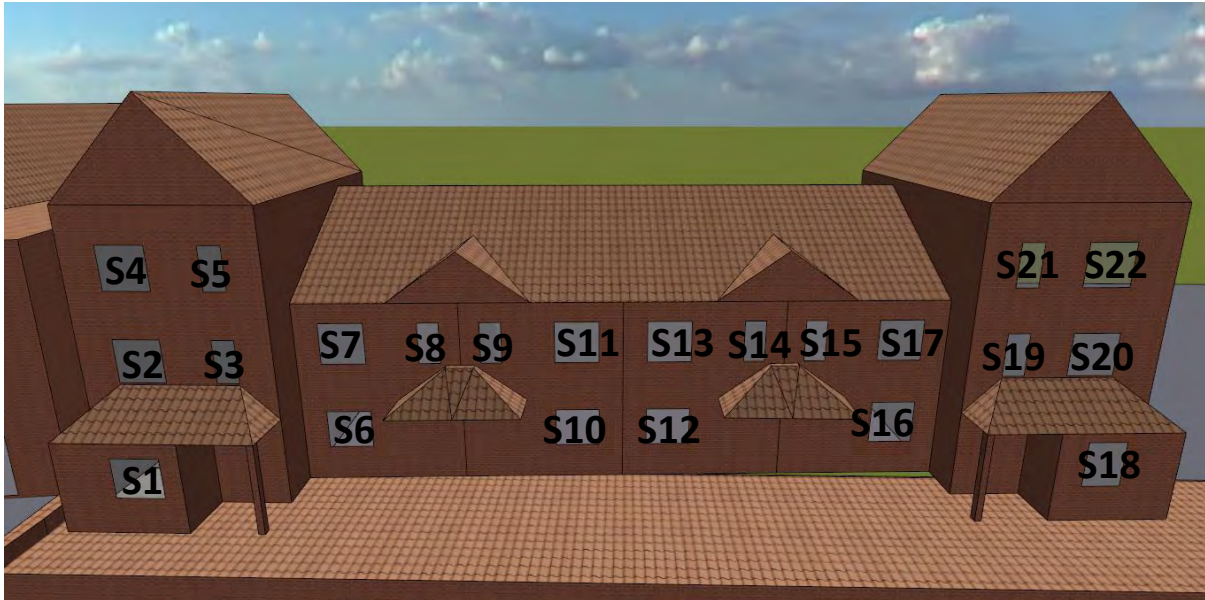
### 9.4.1. Existing site layout



### 9.4.2. Proposed site layout







**6 to 11 Library Court**



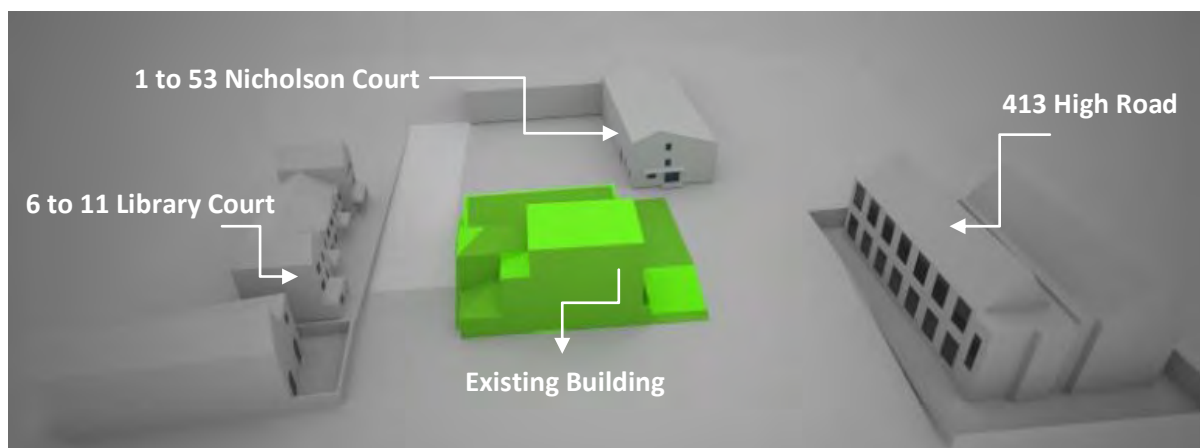
**1 to 53 Nicholson Court**



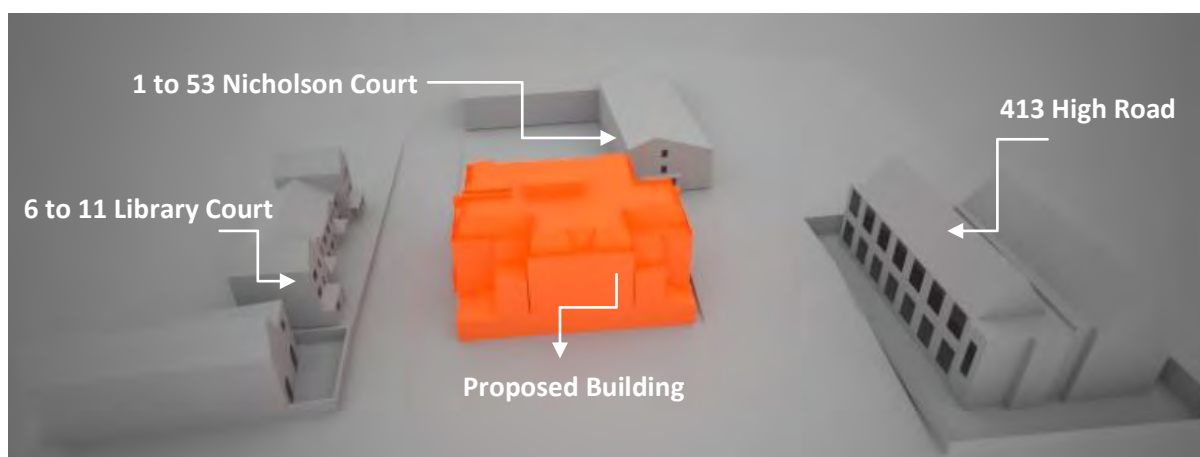
**413 Tottenham High Road**

Location	399 Tottenham High Road N17 6QN
Latitude (°)	51.58 N
Longitude (°)	0.07 W

## 9.5. Model images



**Existing scheme**

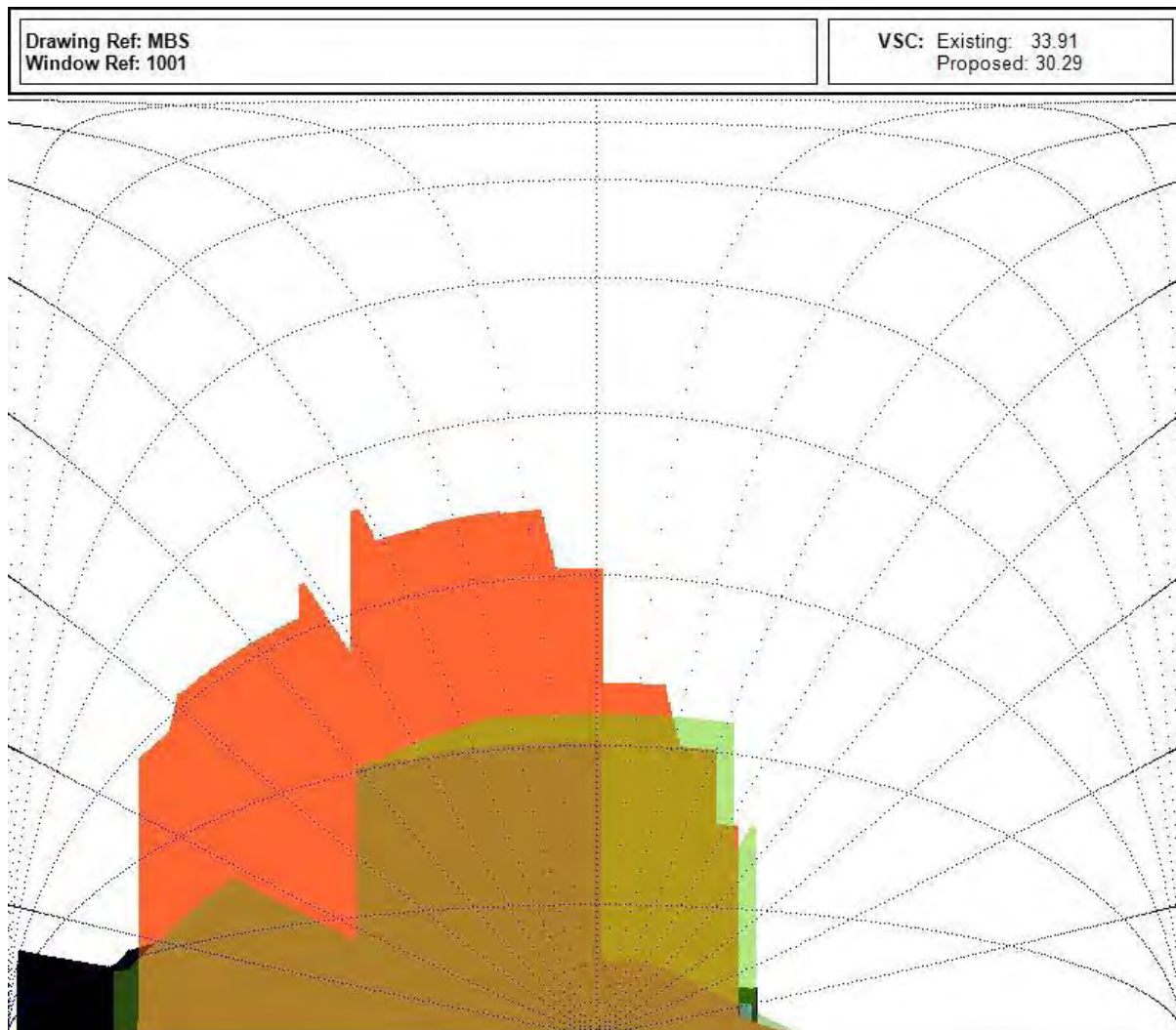


**Proposed scheme**



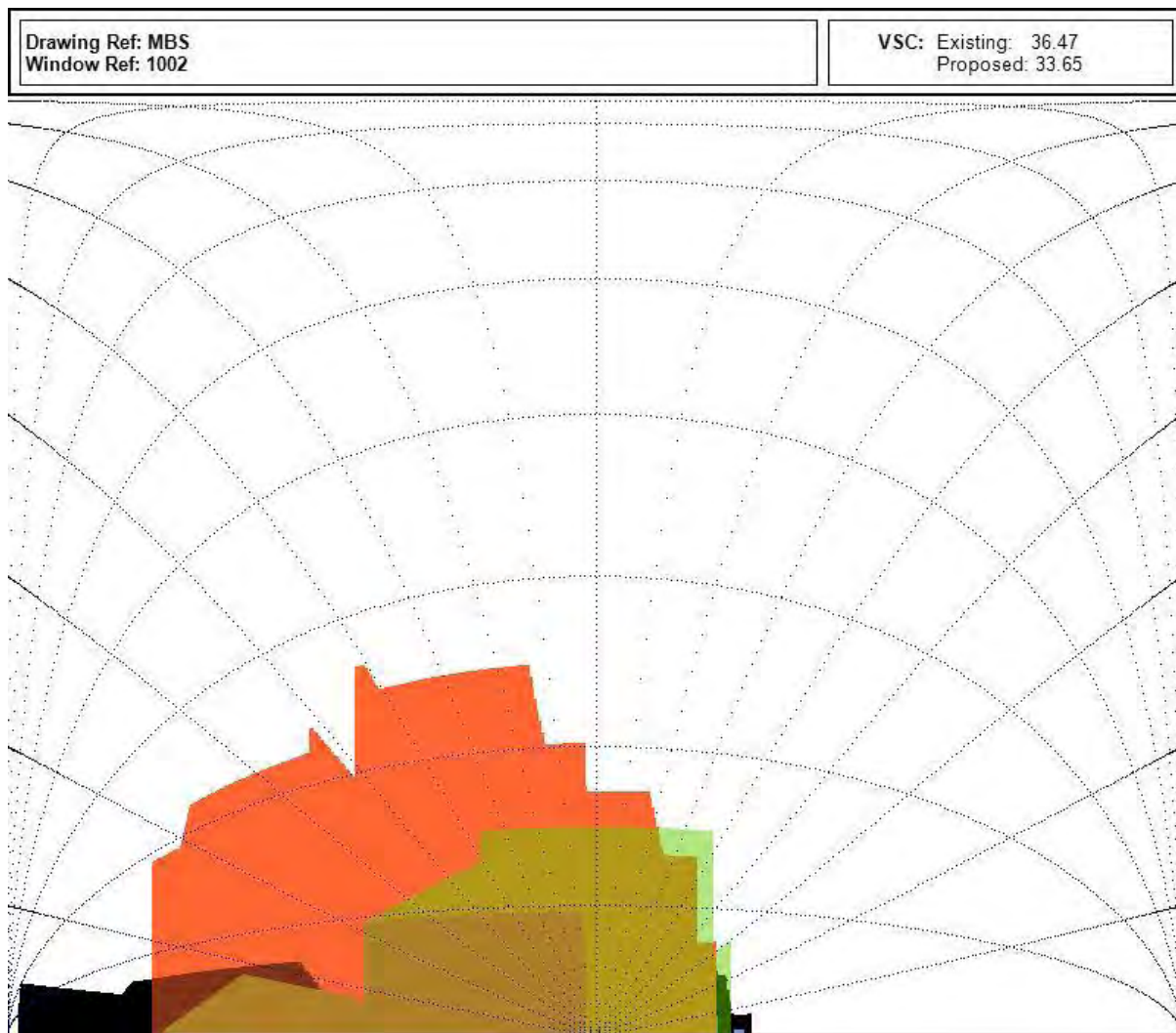
## 9.6. Daylight results

Surface 1 - 6 Library Court - GF



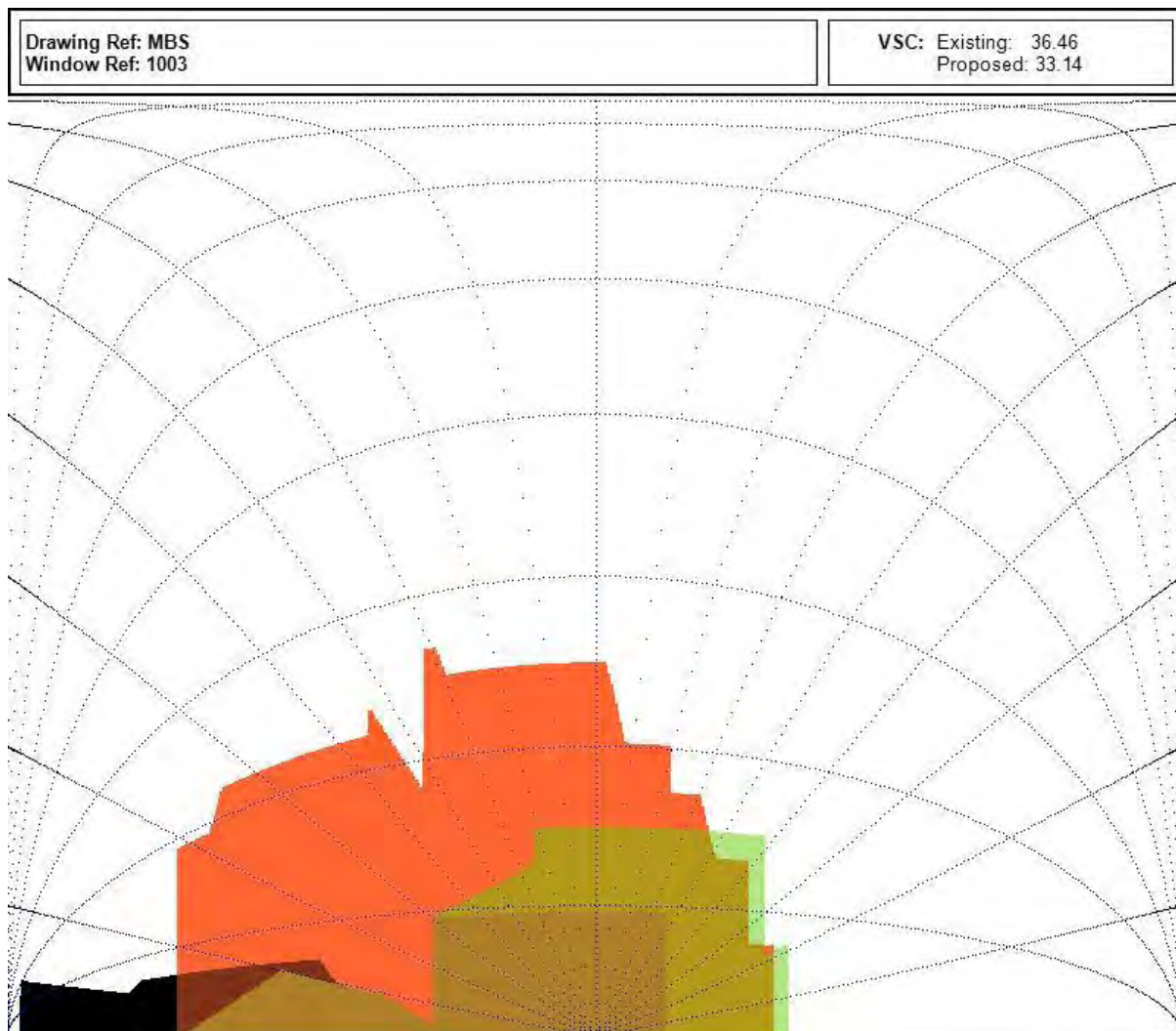
The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

Surface 2 - 6 Library Court - FF



The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

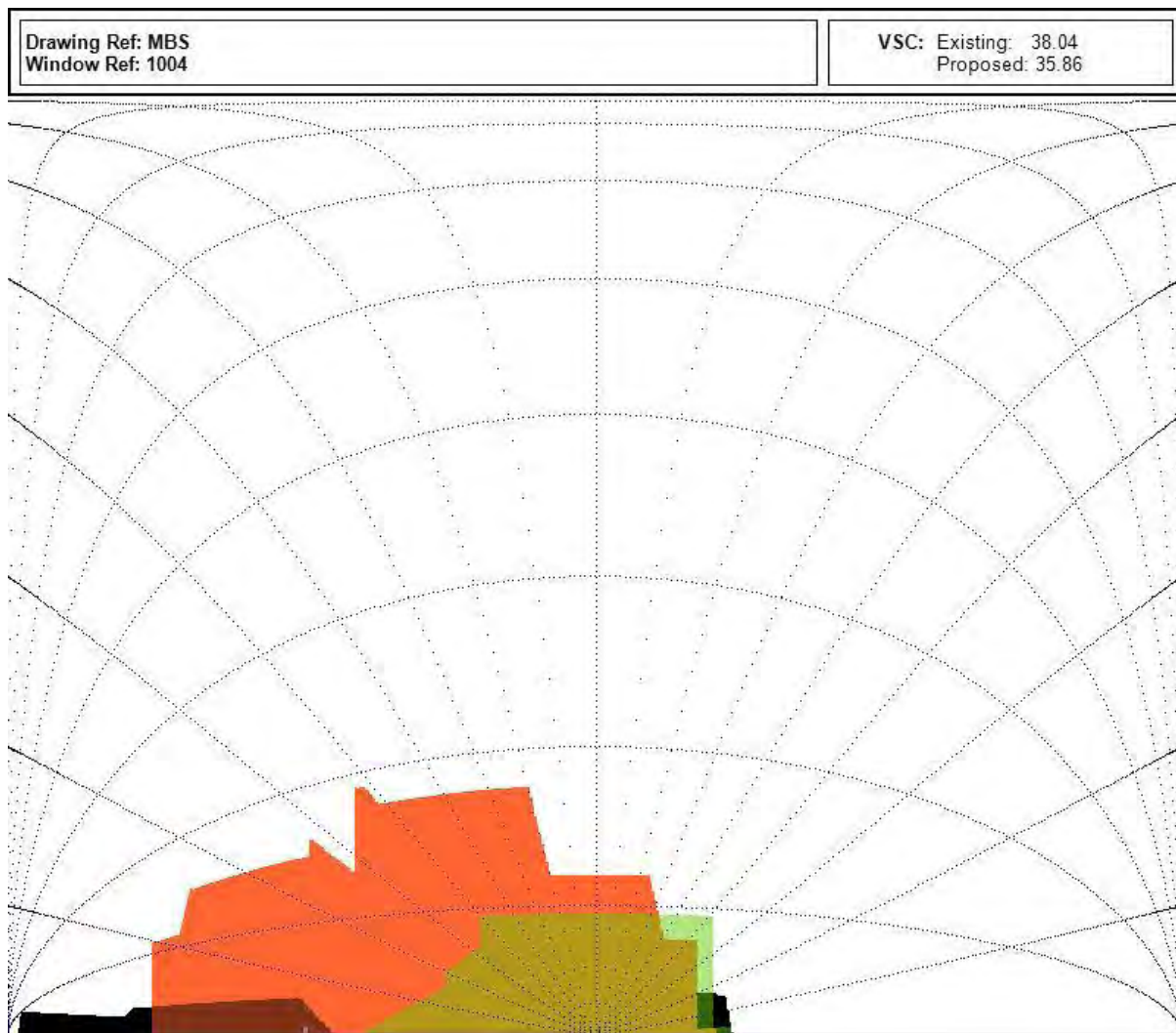
Surface 3 - 6 Library Court - FF



The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

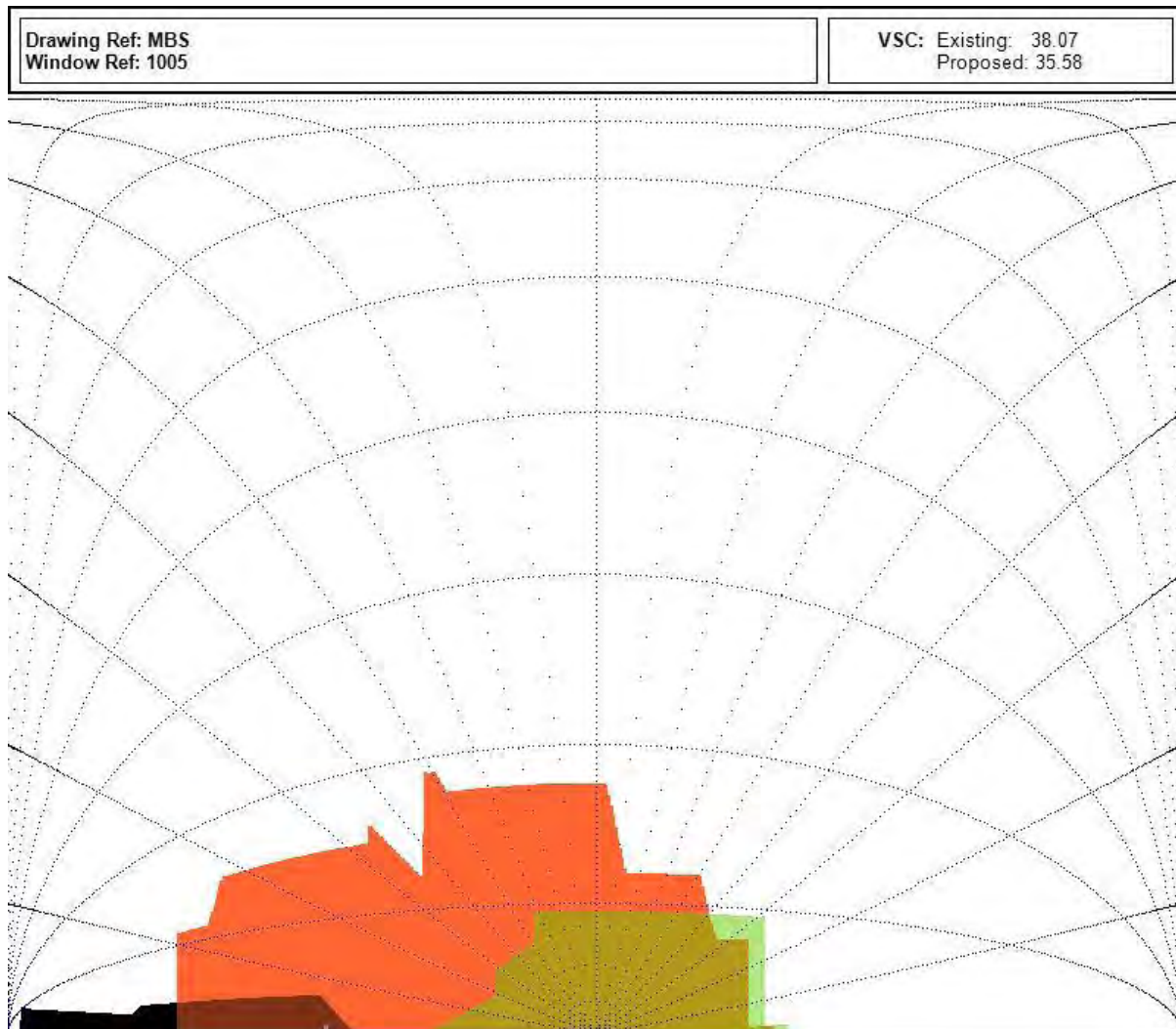


Surface 4 - 6 Library Court - SF



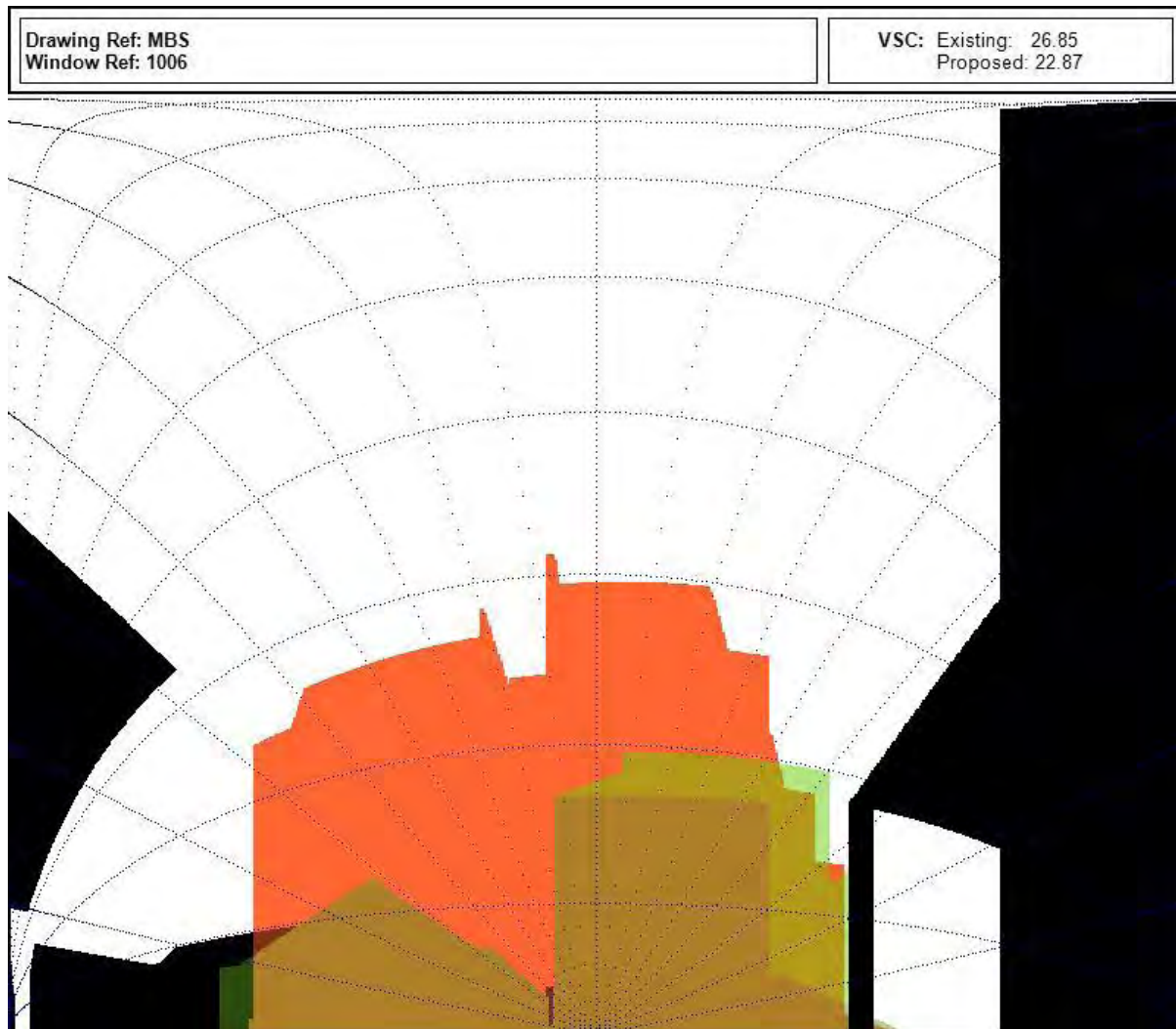
The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

Surface 5 - 6 Library Court - SF



The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

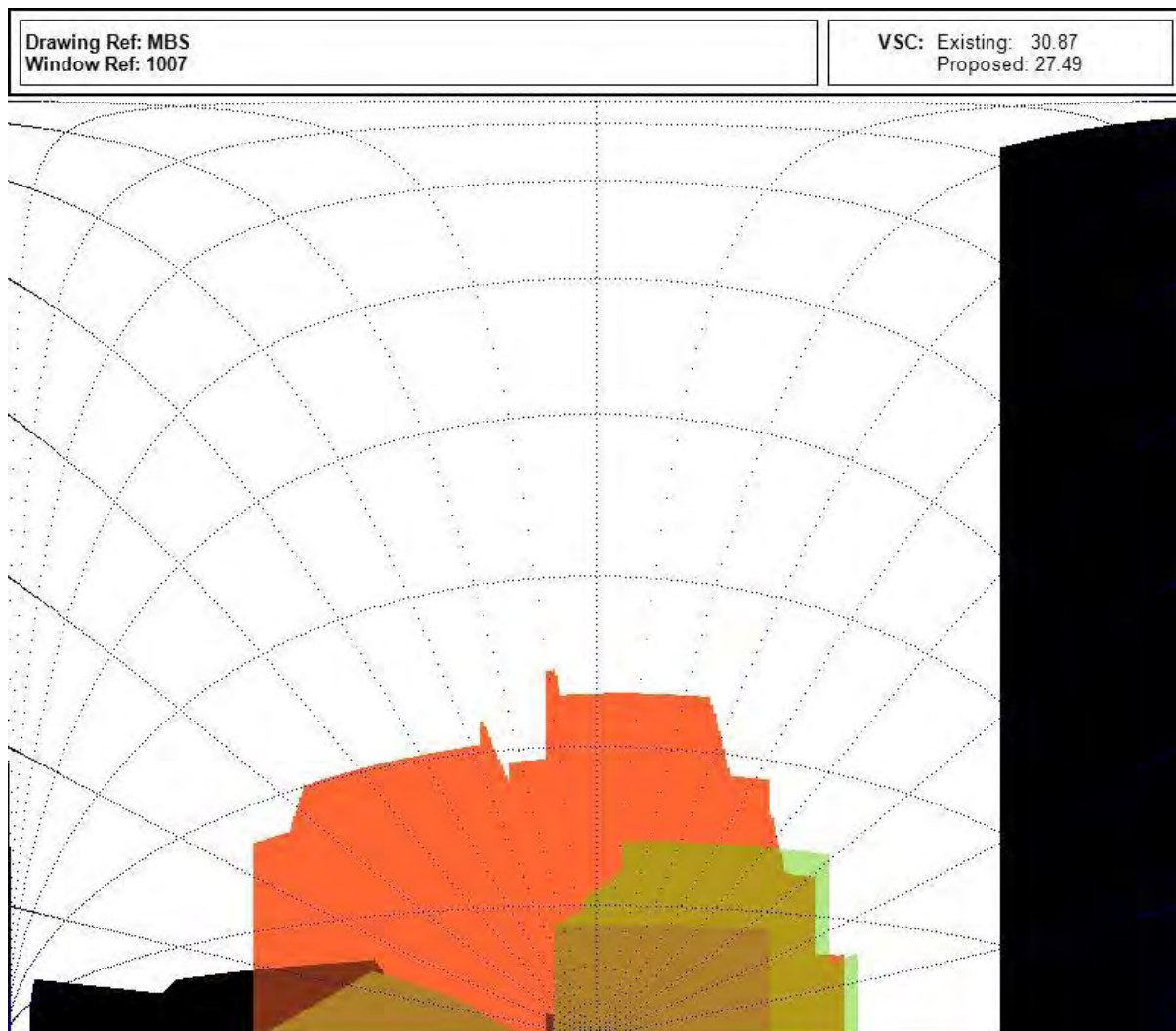
Surface 6 - 7 Library Court - GF



The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

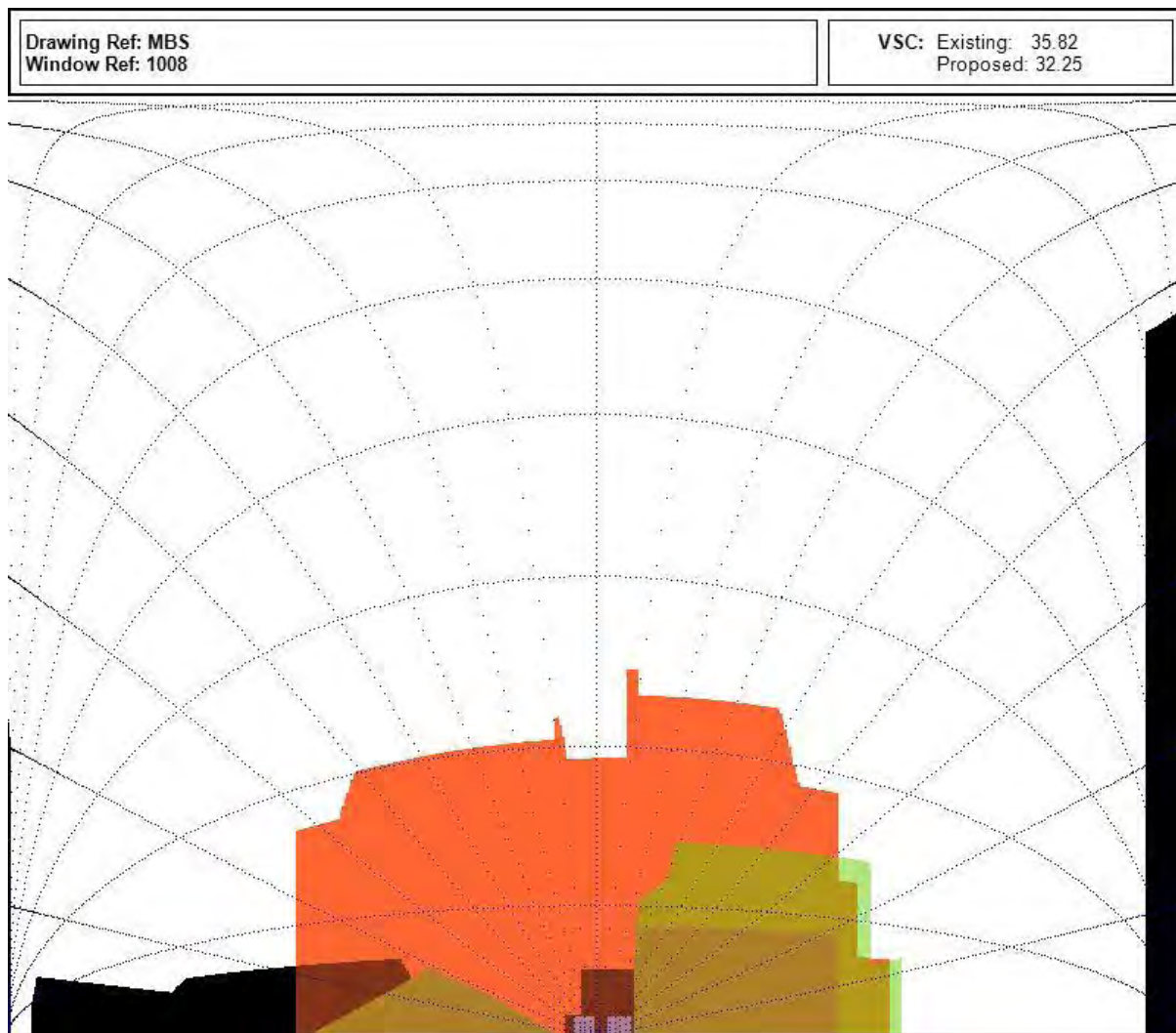


Surface 7 - 7 Library Court - FF



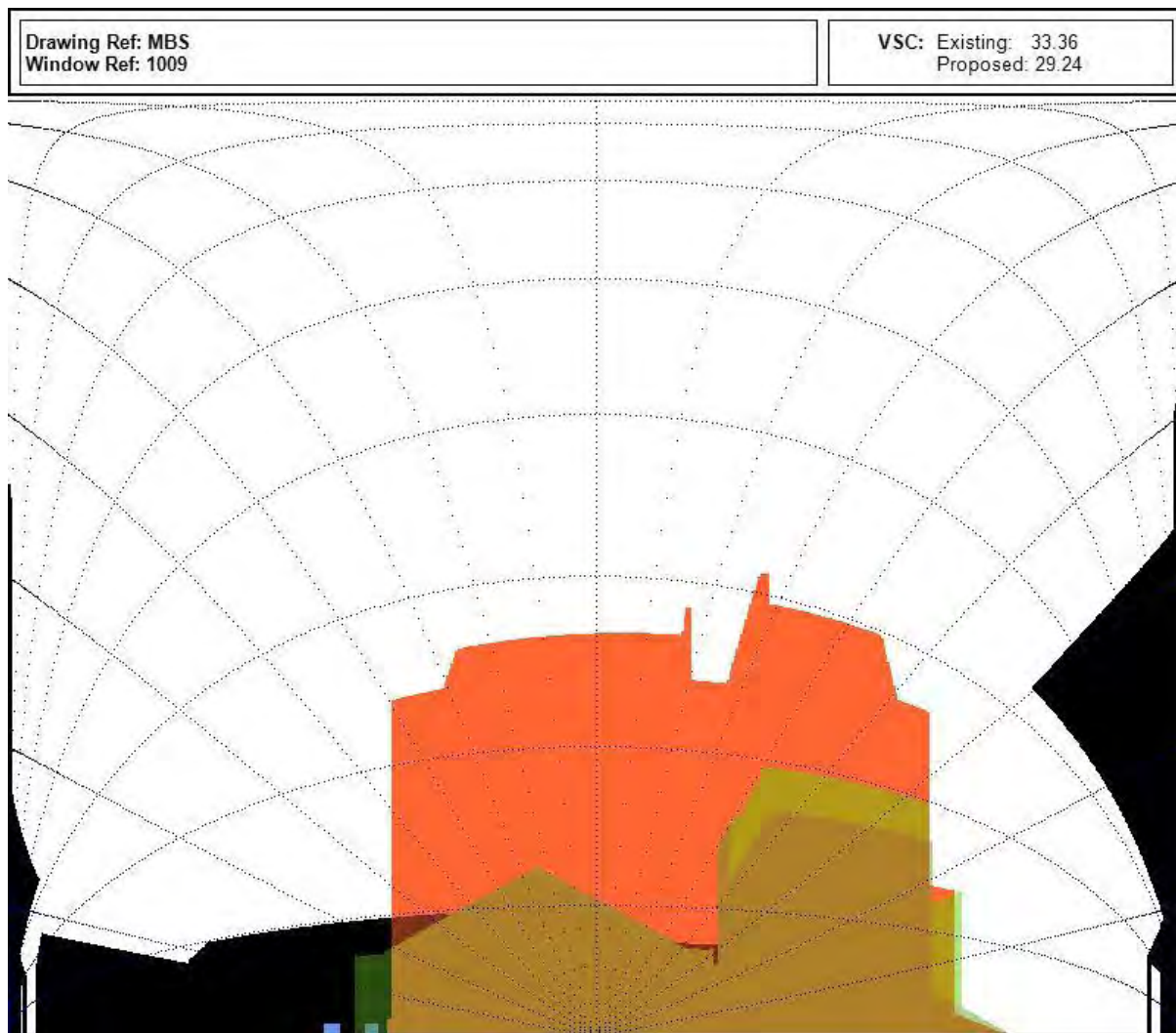
The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

Surface 8 - 7 Library Court - FF



The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

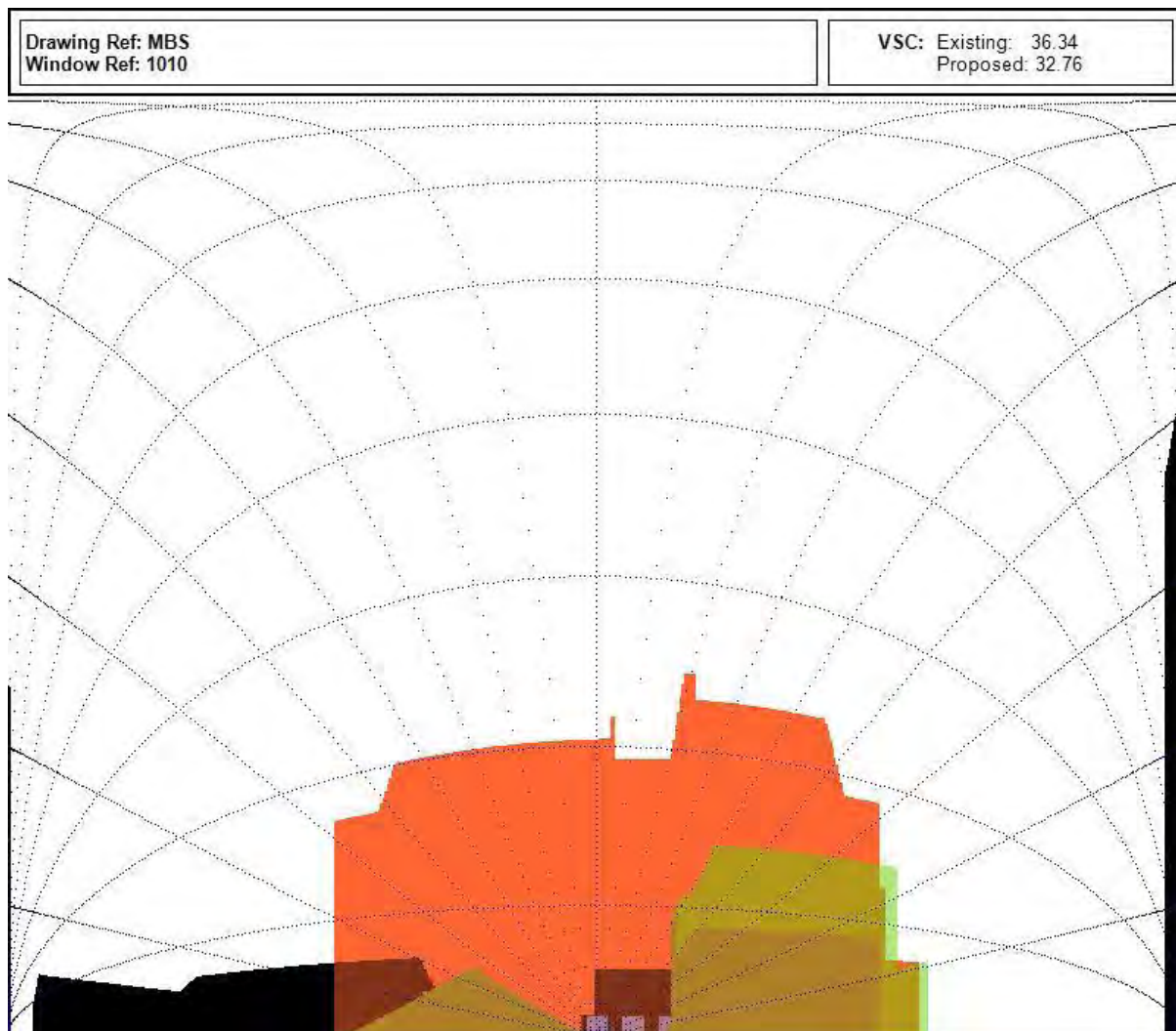
Surface 9 - 8 Library court - GF



The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

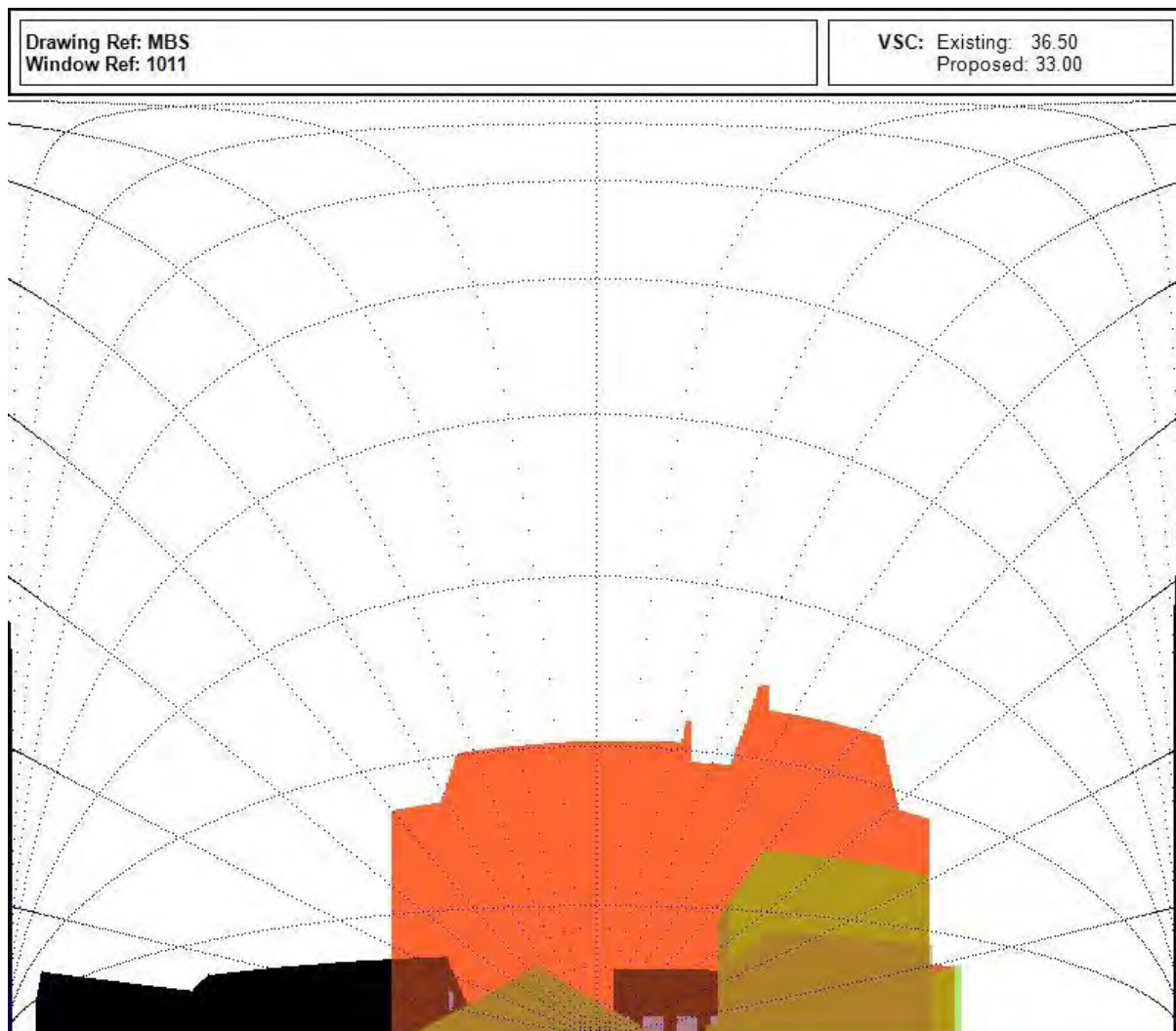


Surface 10 - 8 Library Court - FF



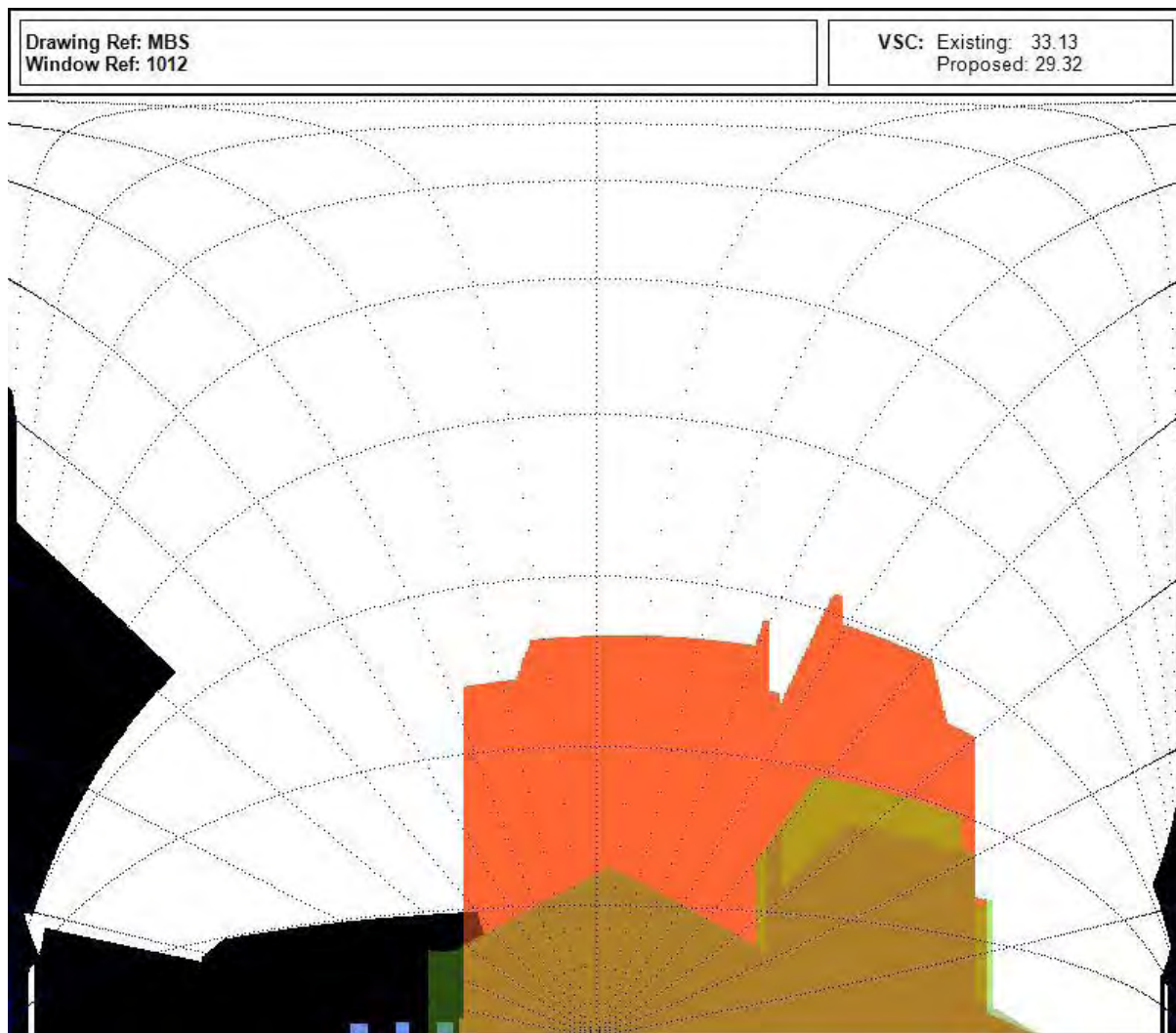
The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

Surface 11 – 8 Library Court - FF



The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

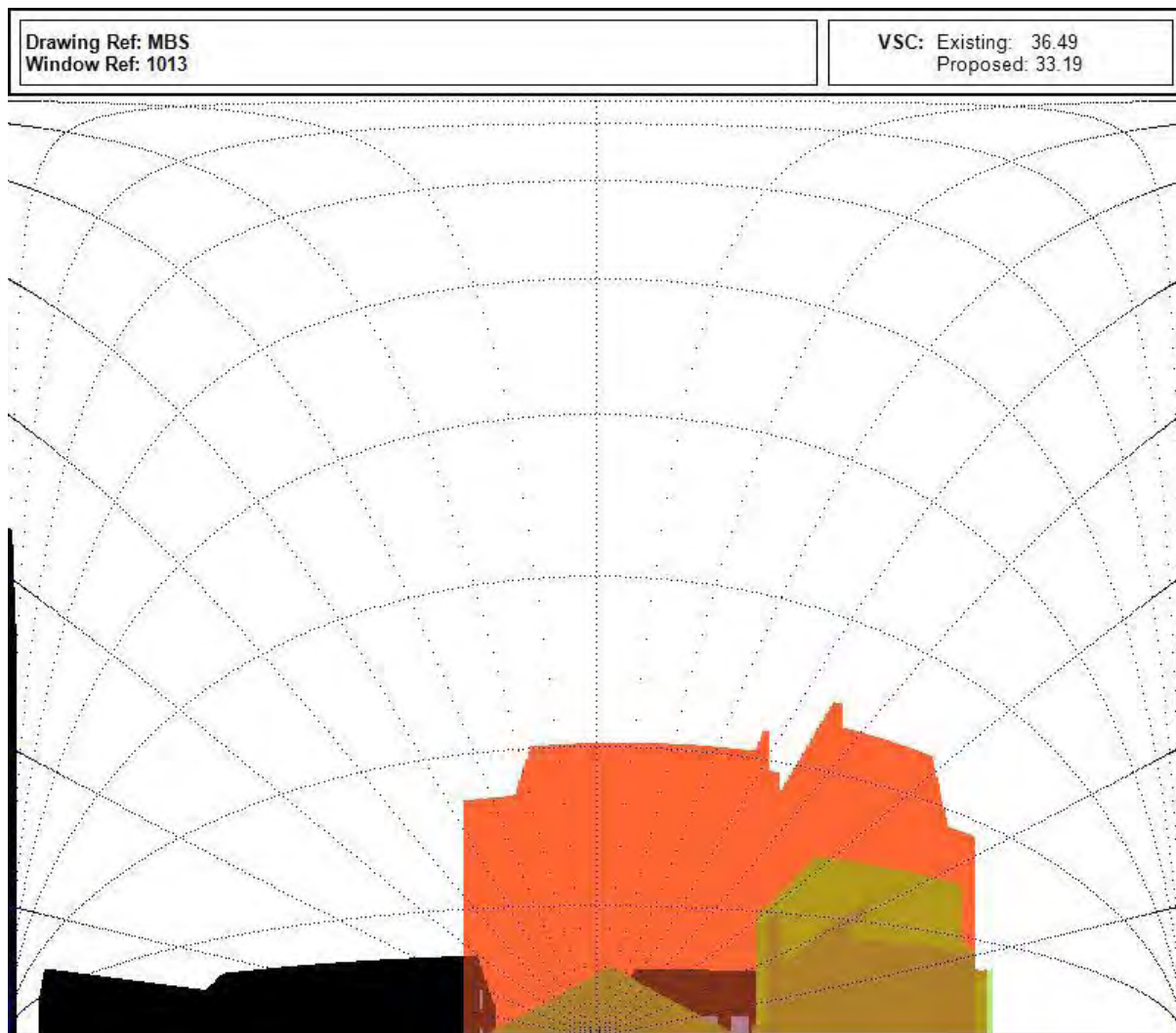
Surface 12 - 9 Library Court - GF



The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

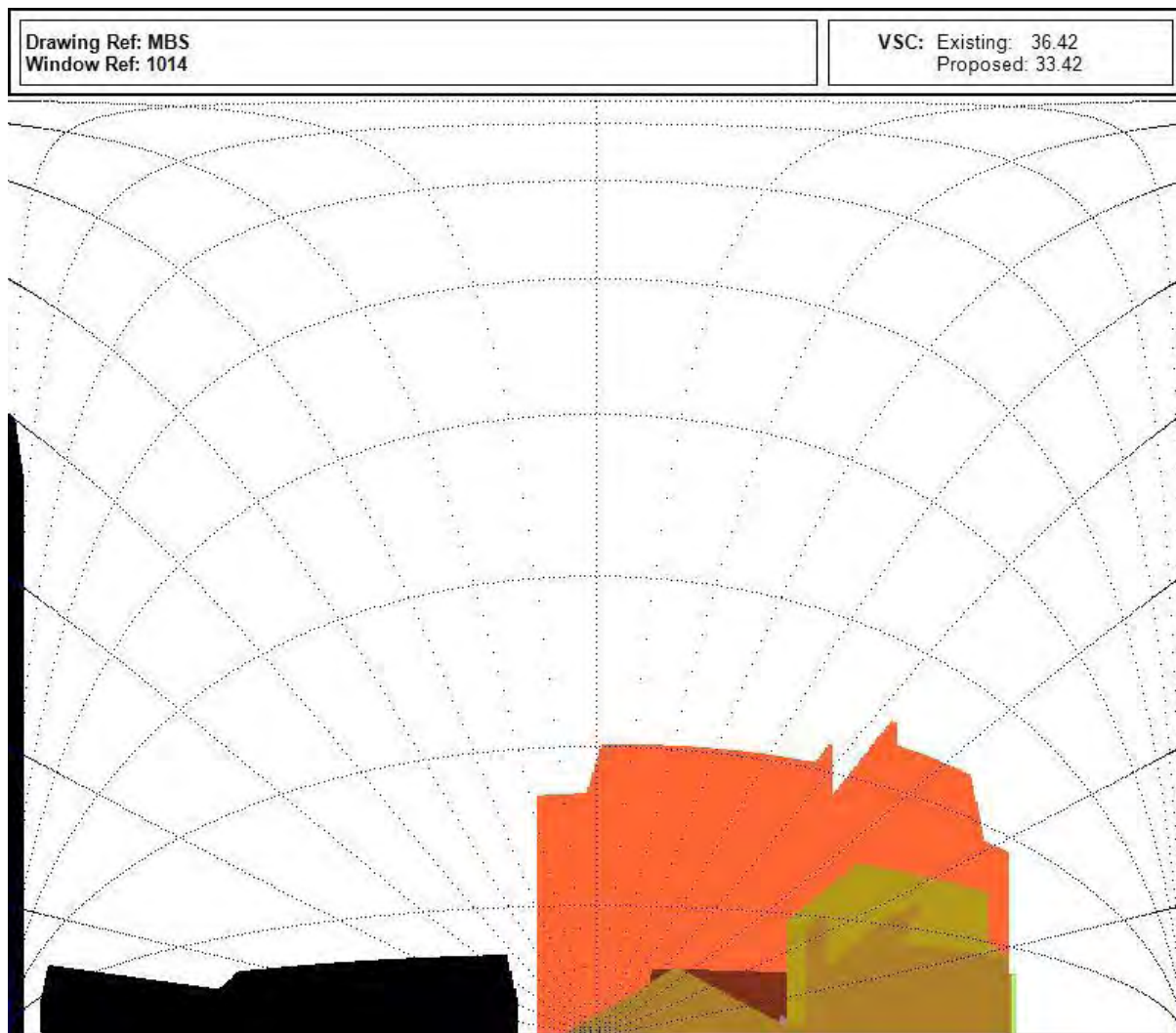


Surface 13 - 9 Library Court - FF



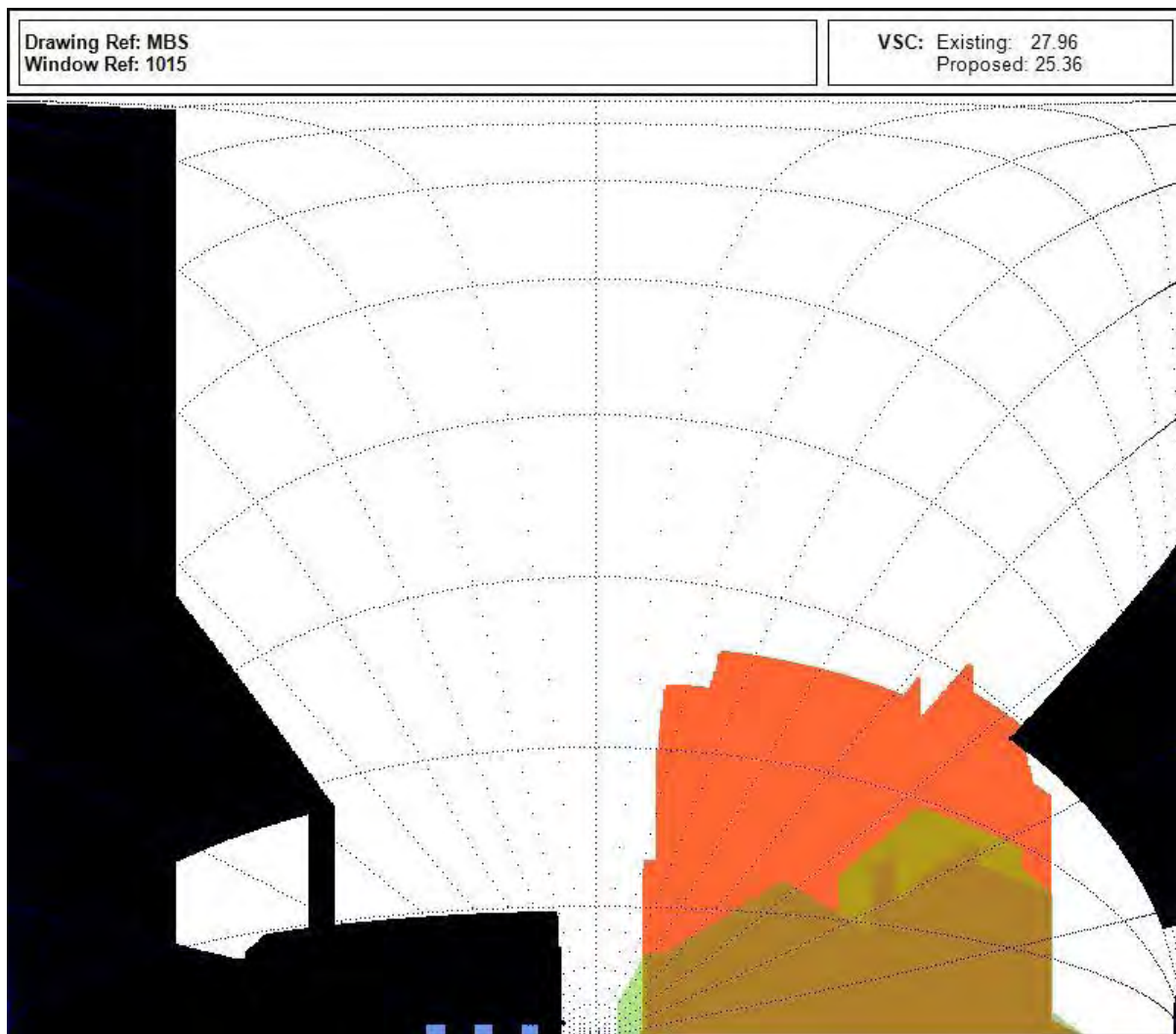
The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

Surface 14 - 9 Library Court - FF



The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

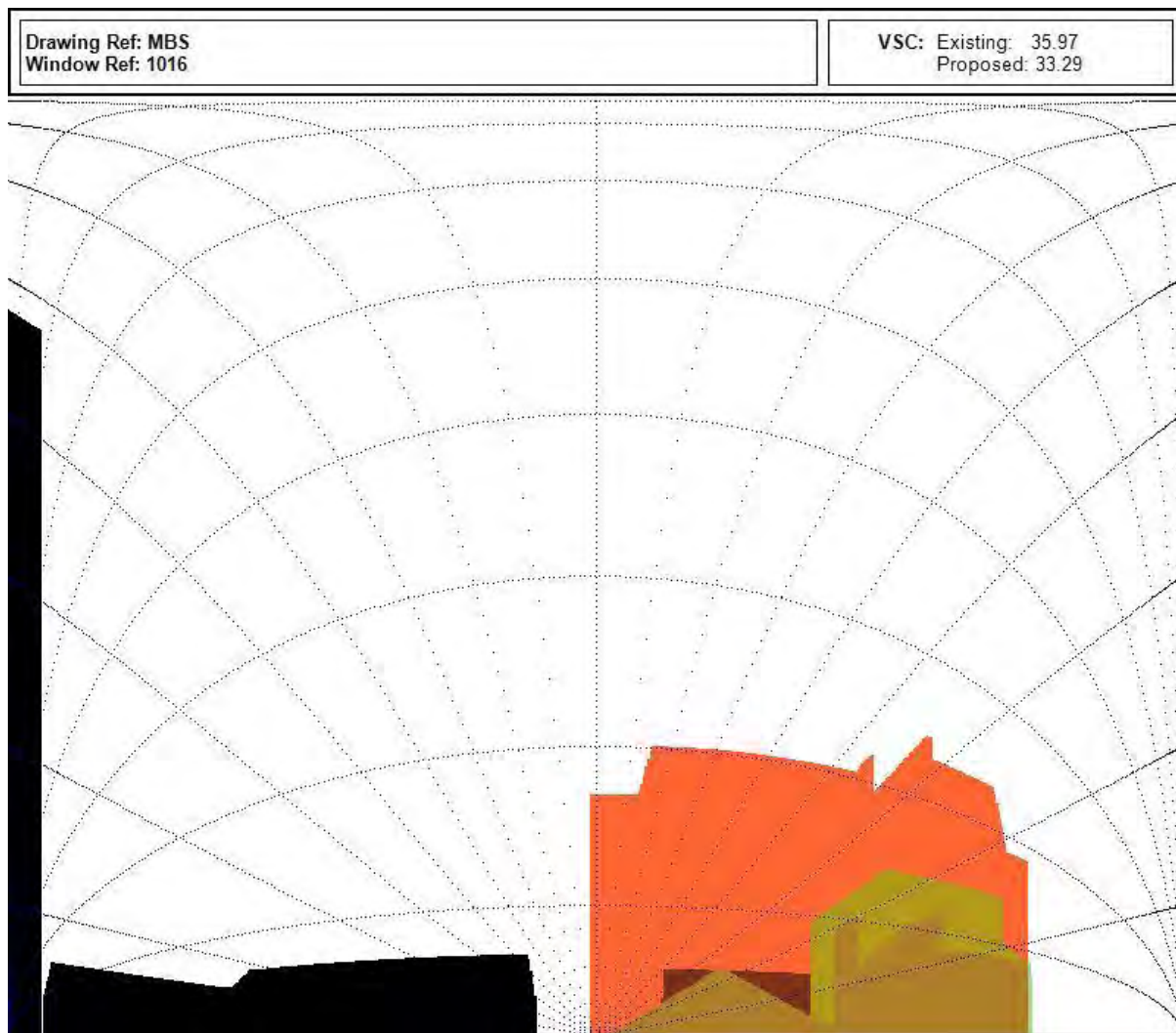
Surface 15 - 10 Library Court - GF



The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

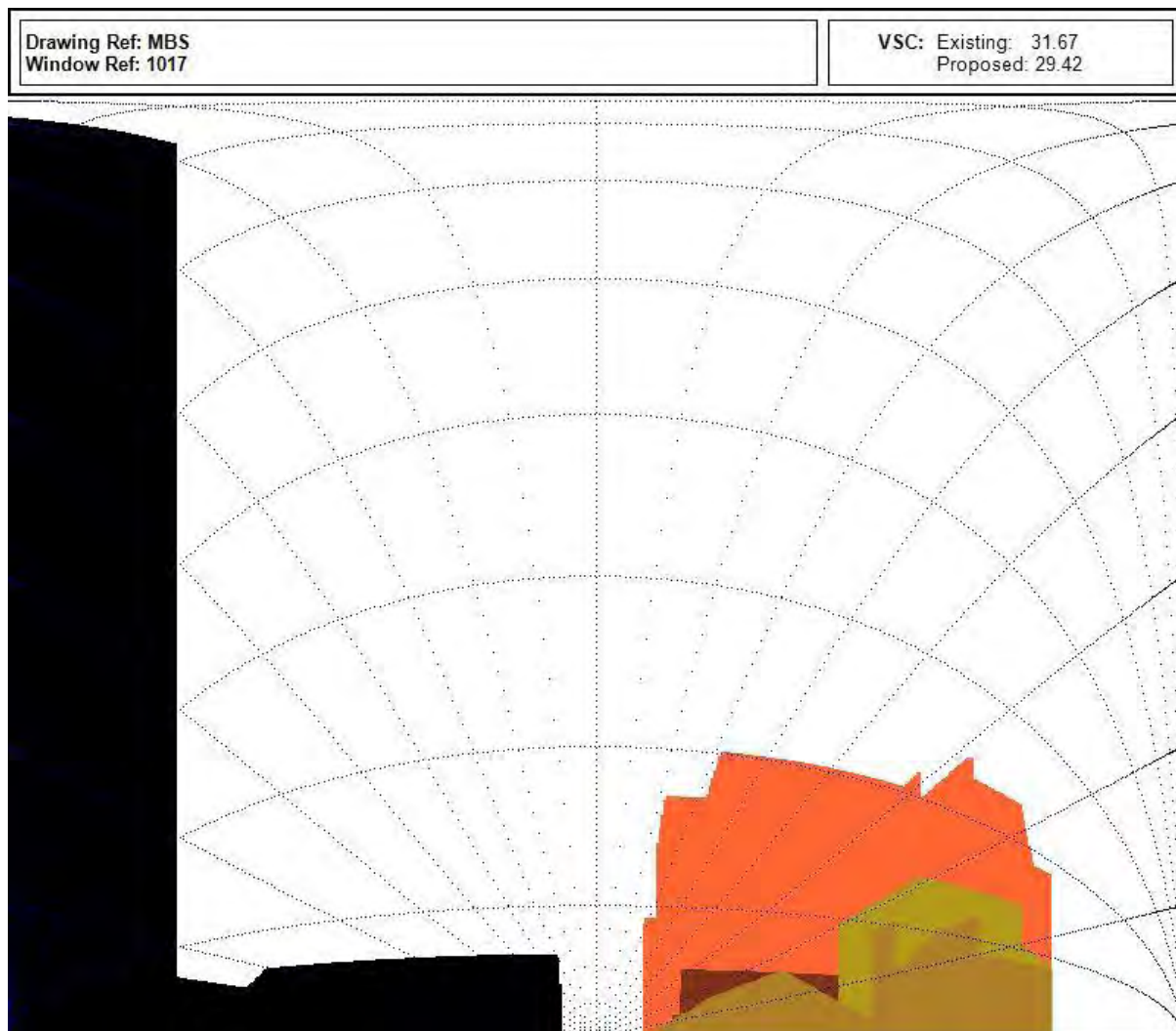


Surface 16 - 10 Library Court - FF



The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

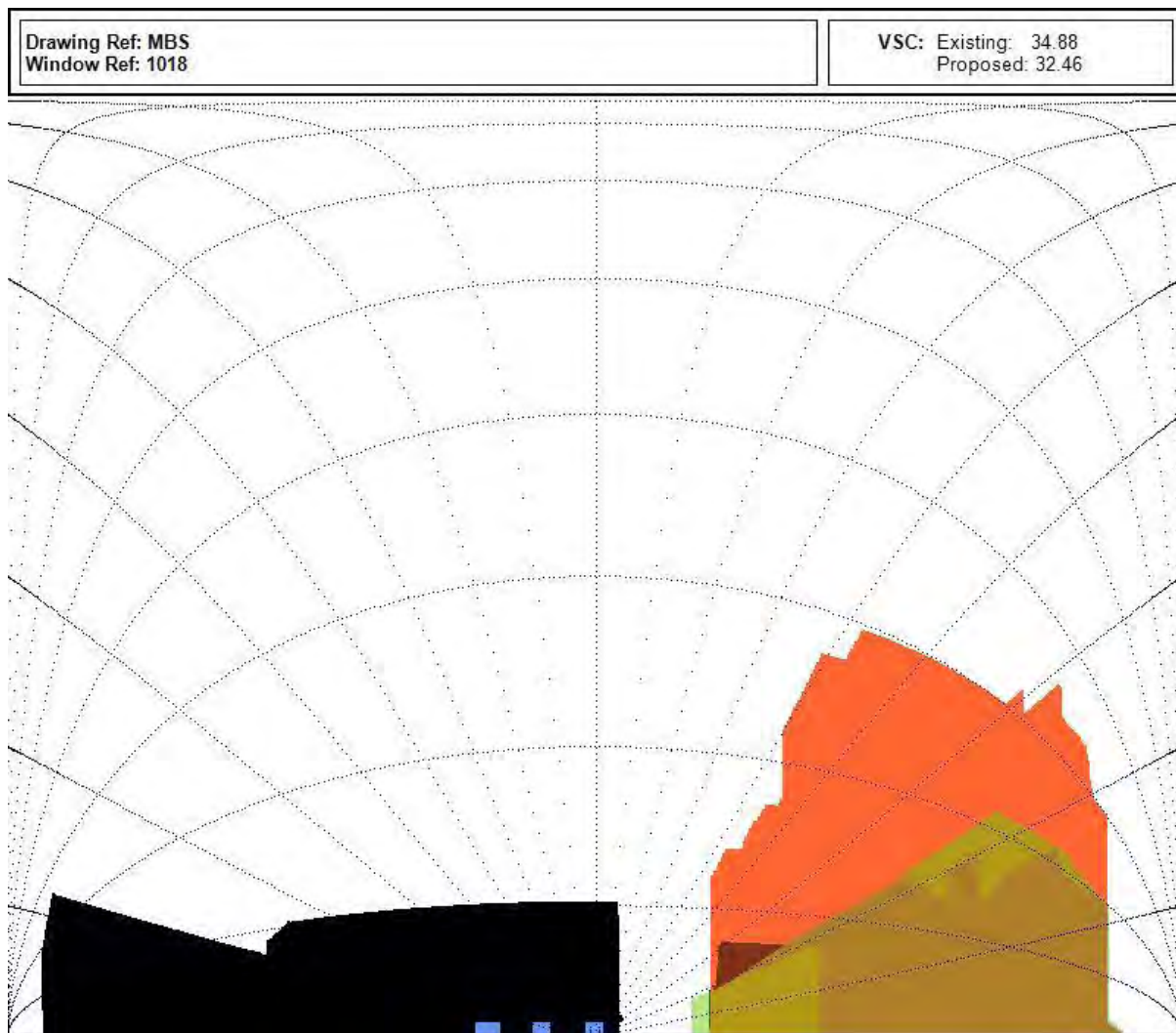
Surface 17 - 10 Library Court - FF



The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

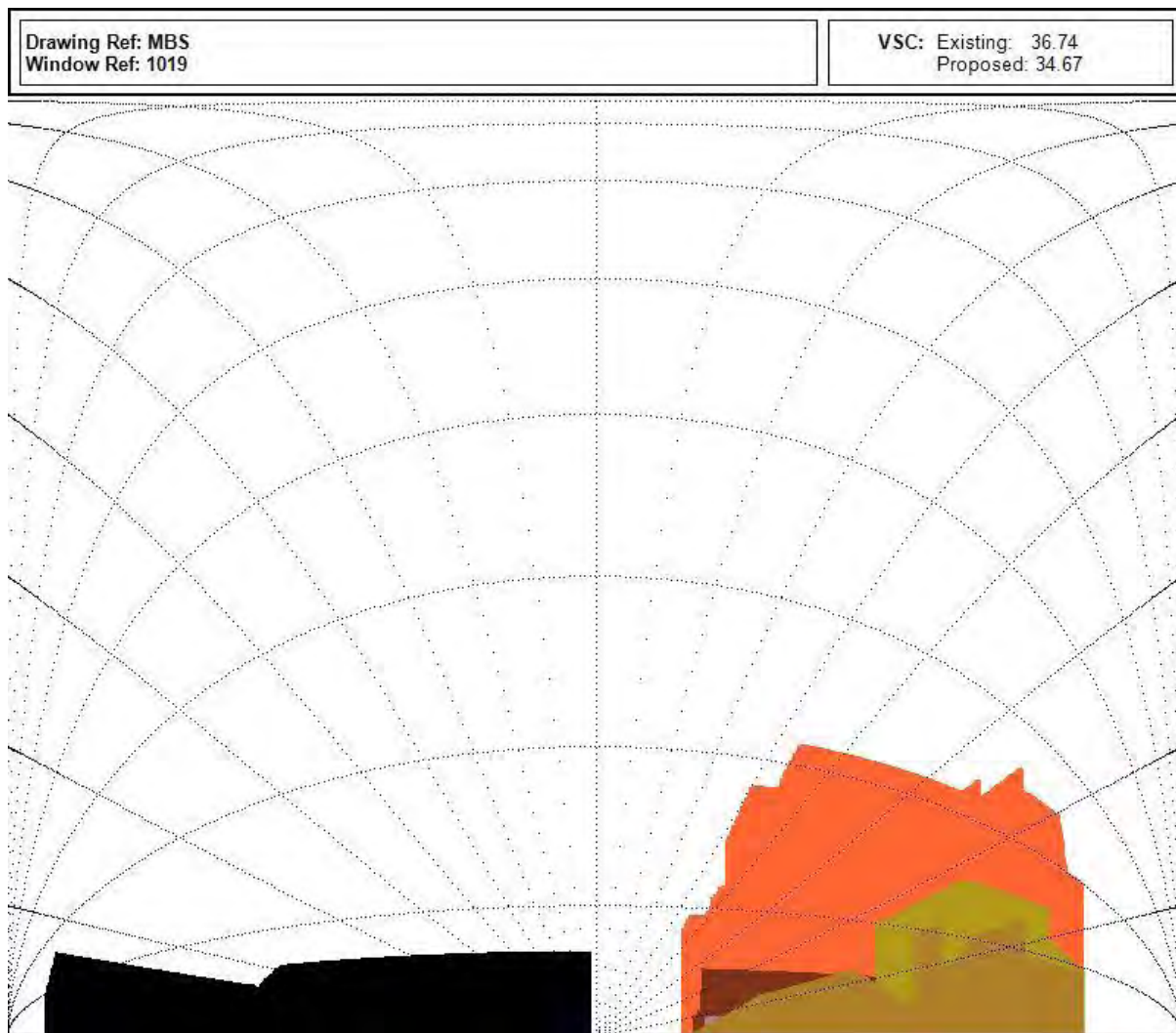


Surface 18 - 11 Library Court - GF



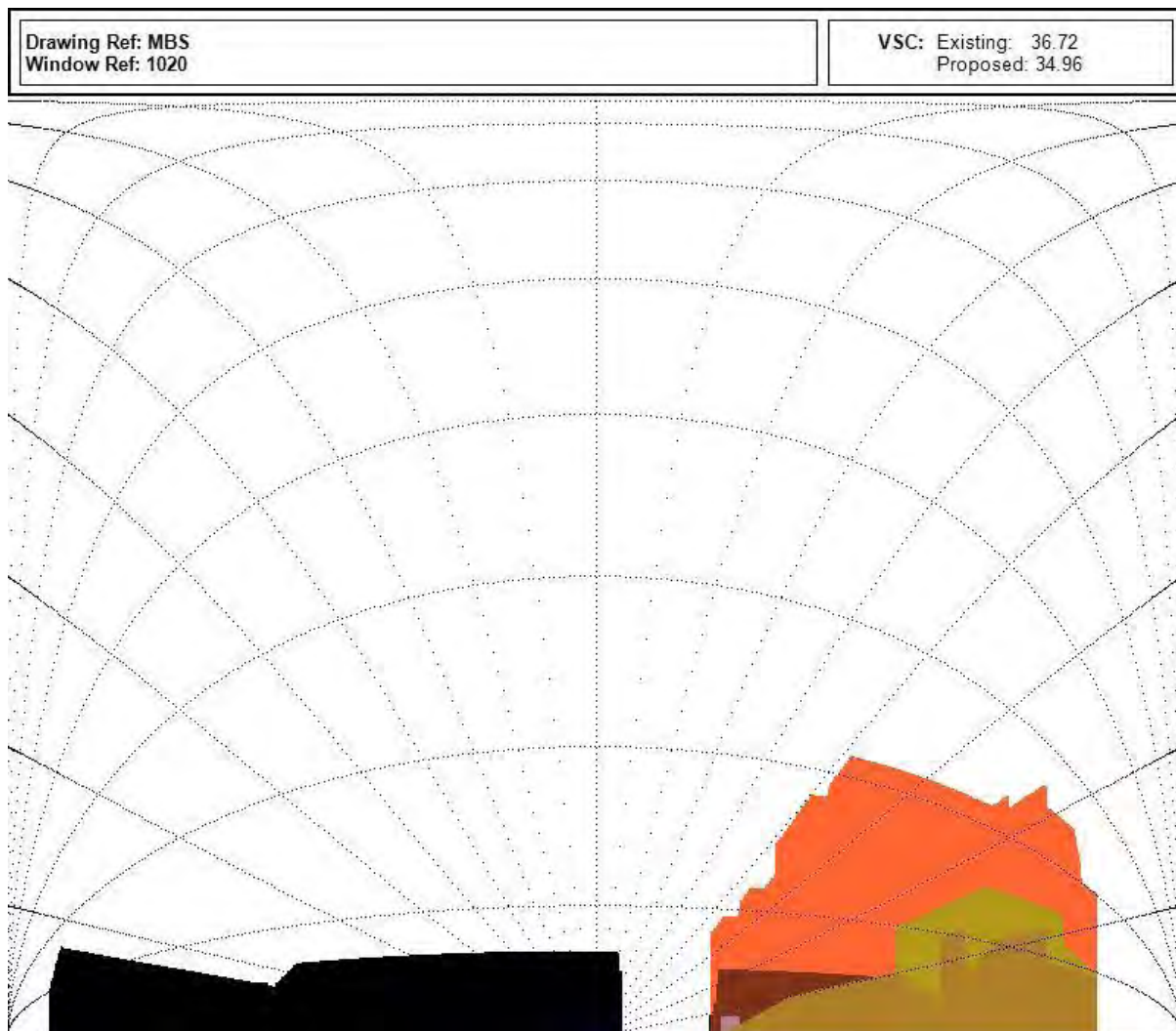
The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

Surface 19 - 11 Library Court - FF



The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

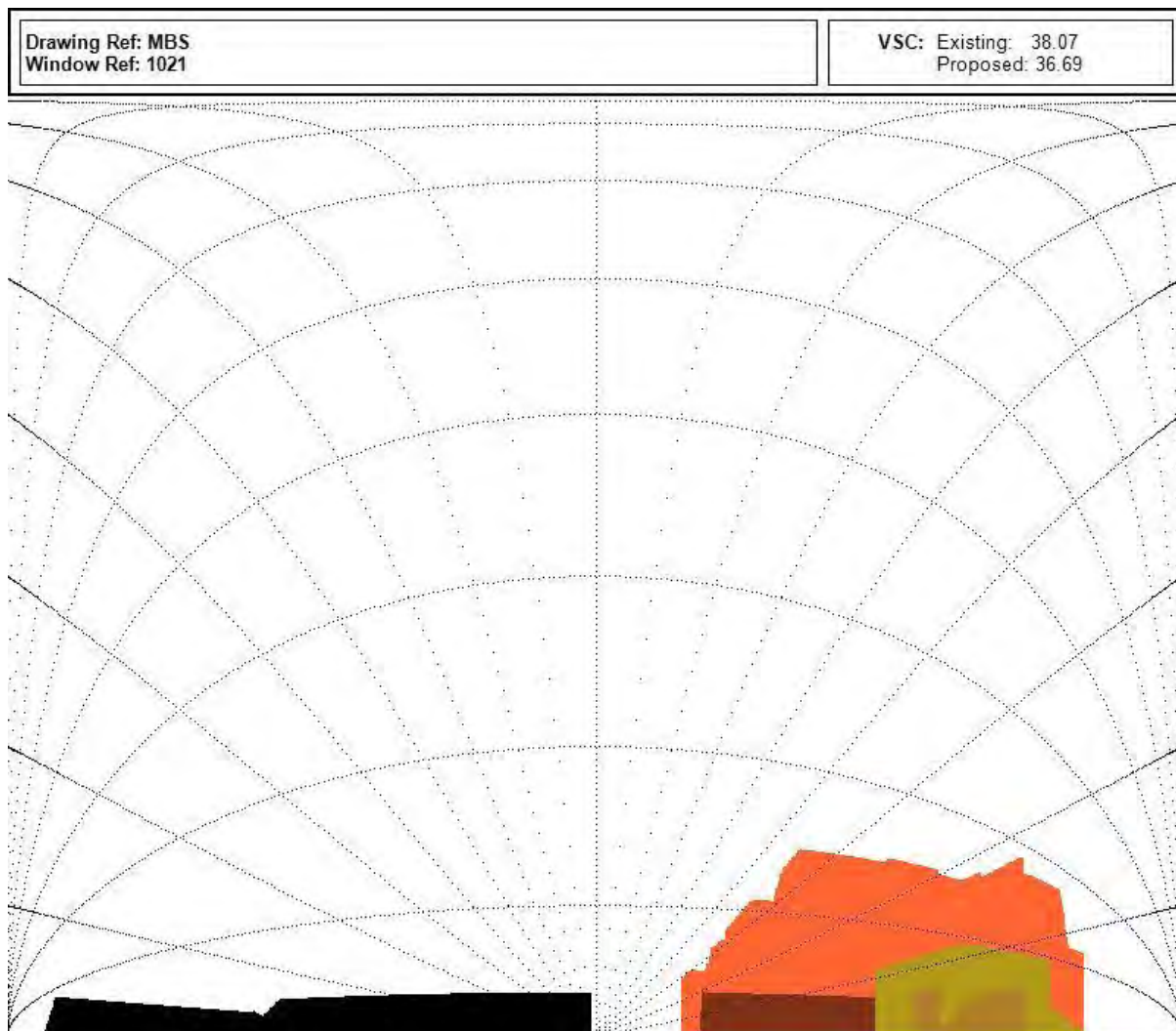
Surface 20 - 11 Library Court - FF



The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

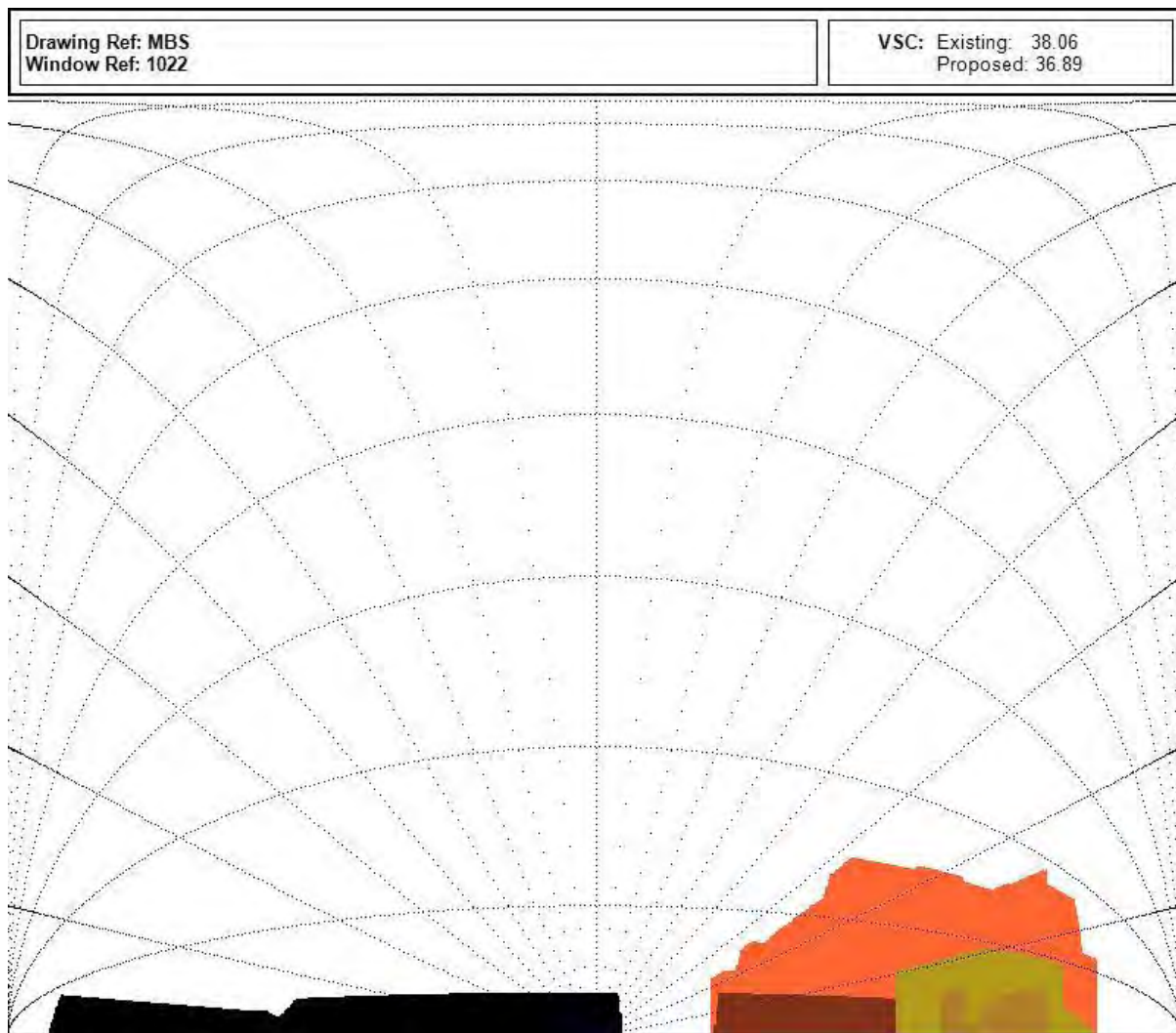


Surface 21 - 11 Library Court - SF



The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

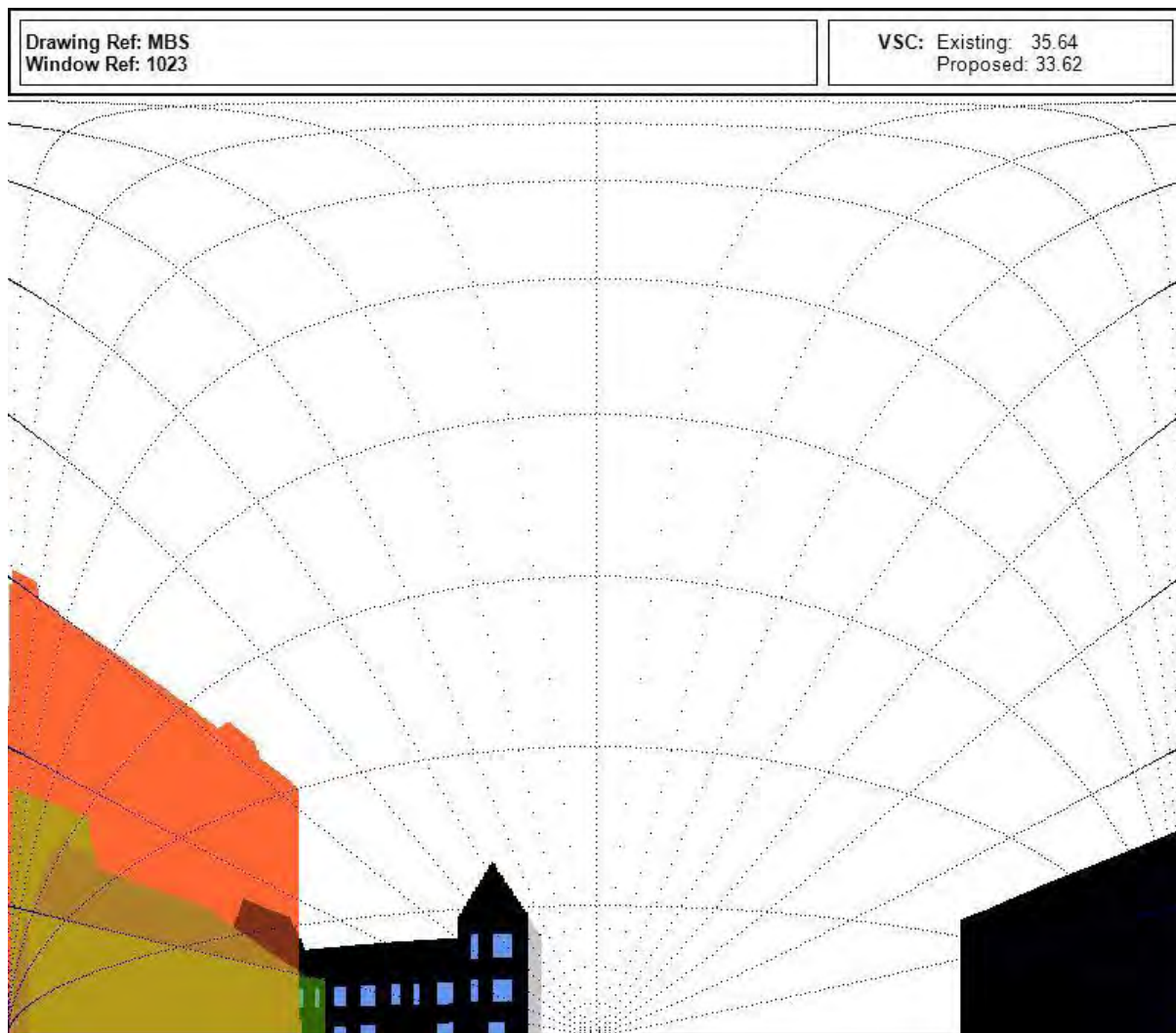
Surface 22 - 11 Library Court - SF



The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

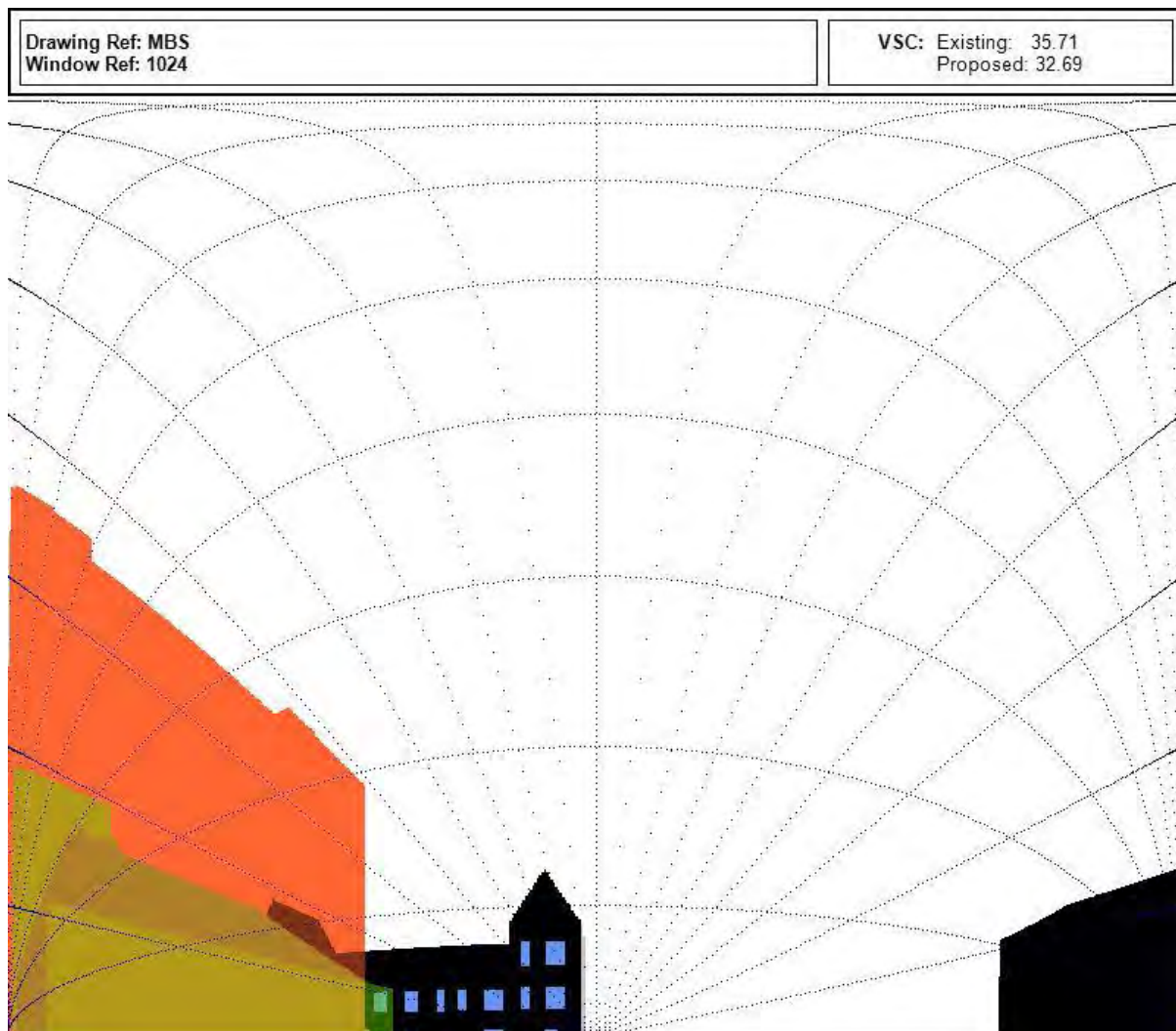


Surface 23 - 1 to 53 Nicholson Court - GF



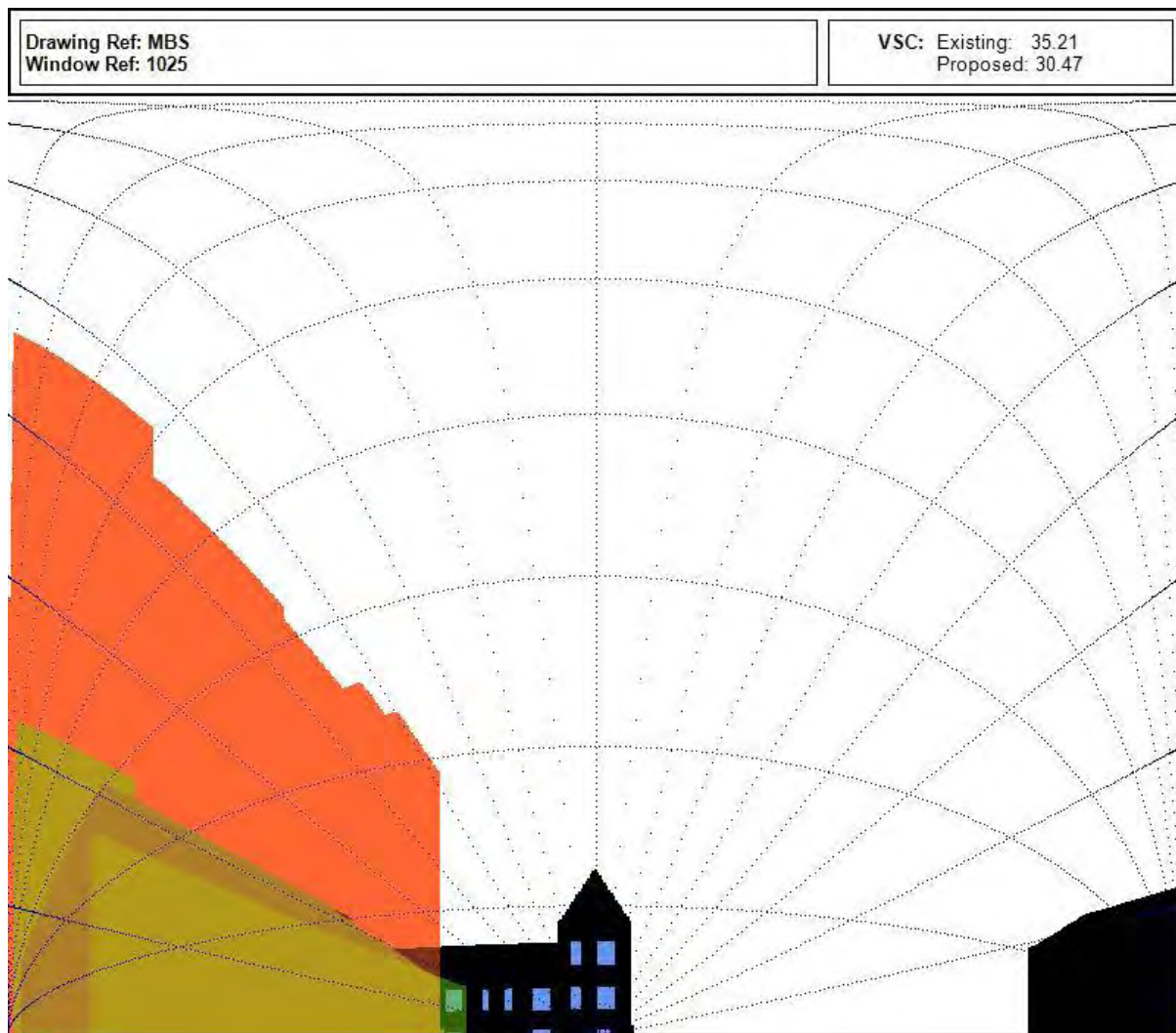
The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

Surface 24 - 1 to 53 Nicholson Court - GF



The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

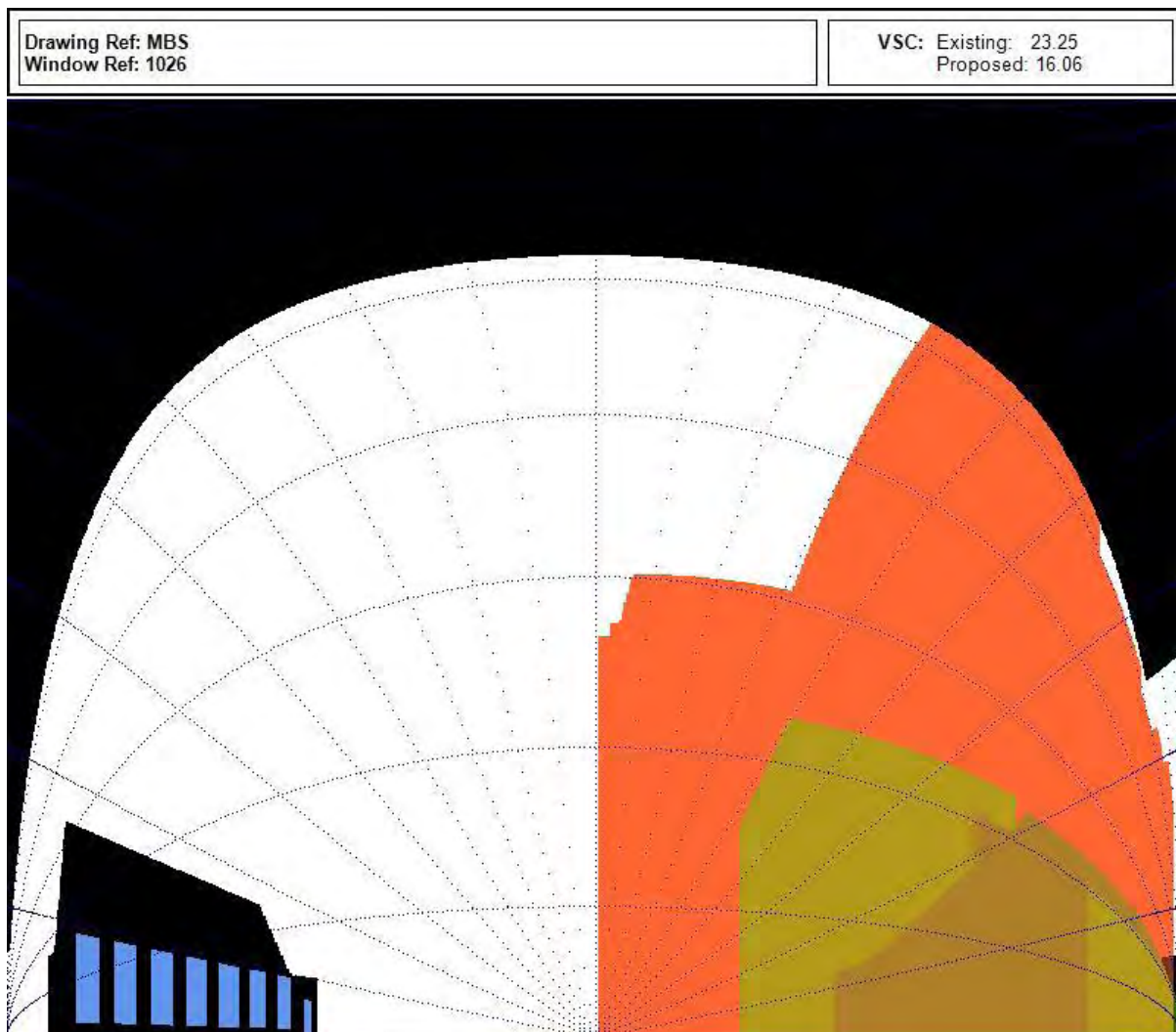
Surface 25 - 1 to 53 Nicholson Court - GF



The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

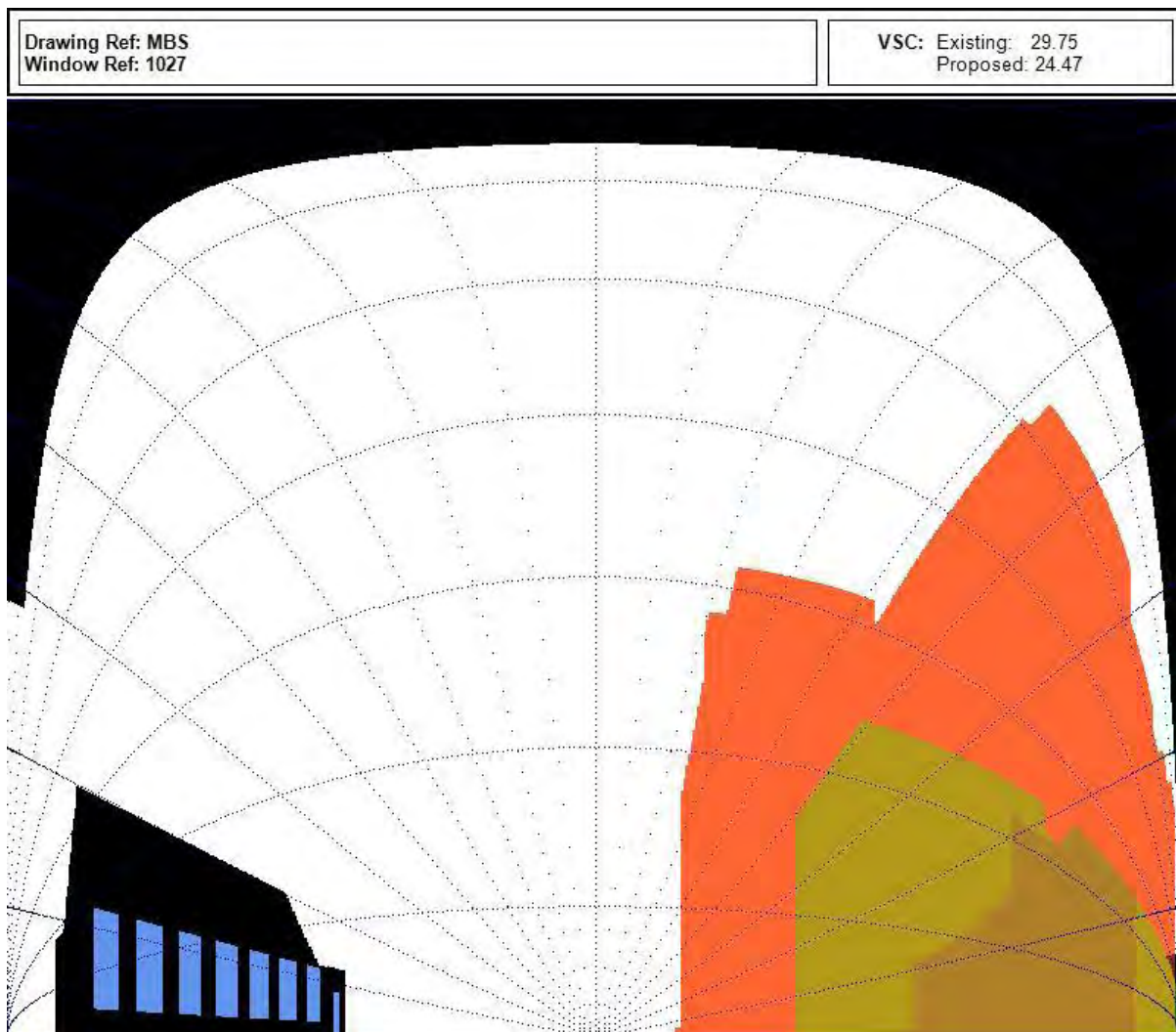


Surface 26 - 1 to 53 Nicholson Court - GF



The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

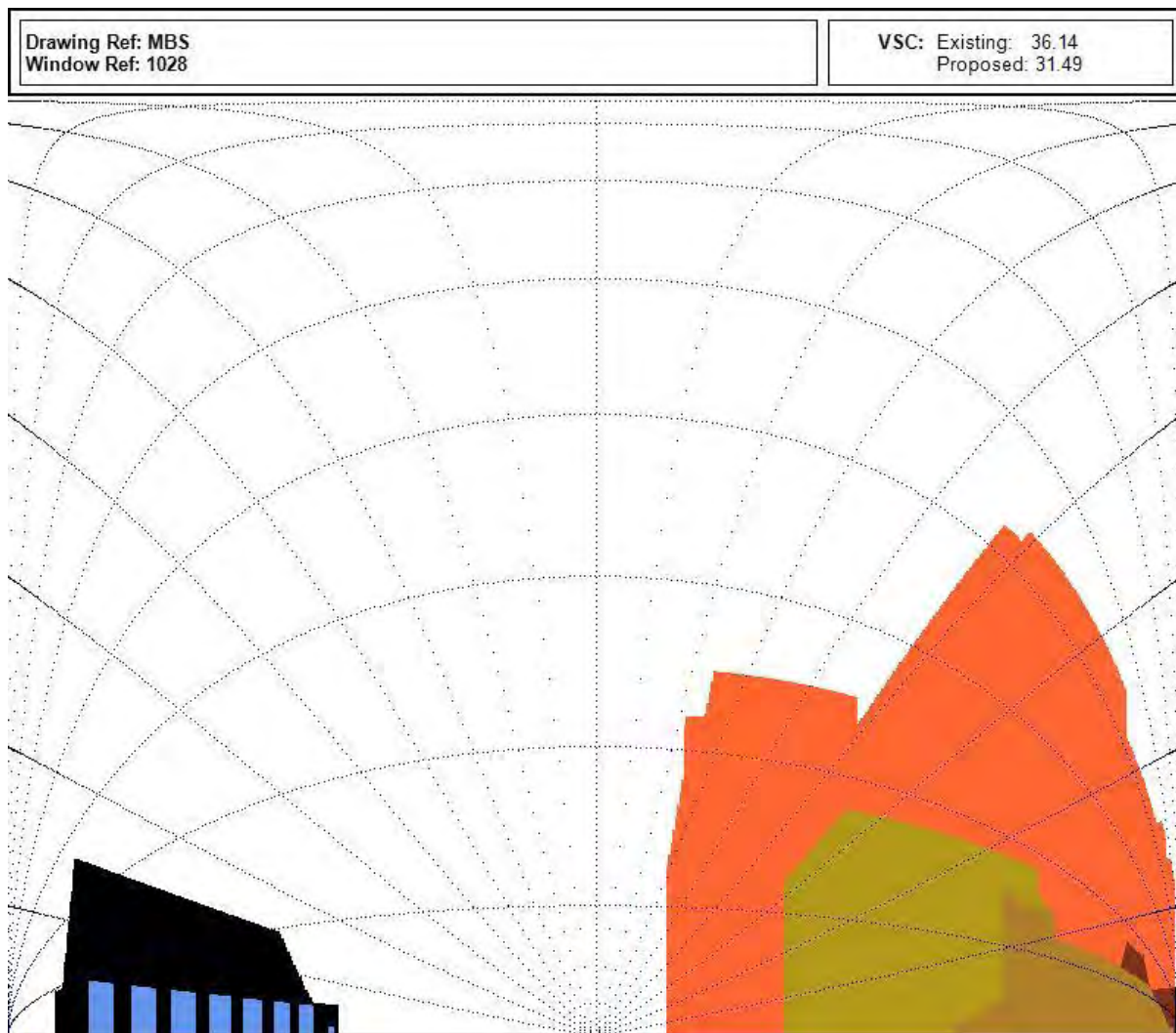
Surface 27 - 1 to 53 Nicholson Court - GF



The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

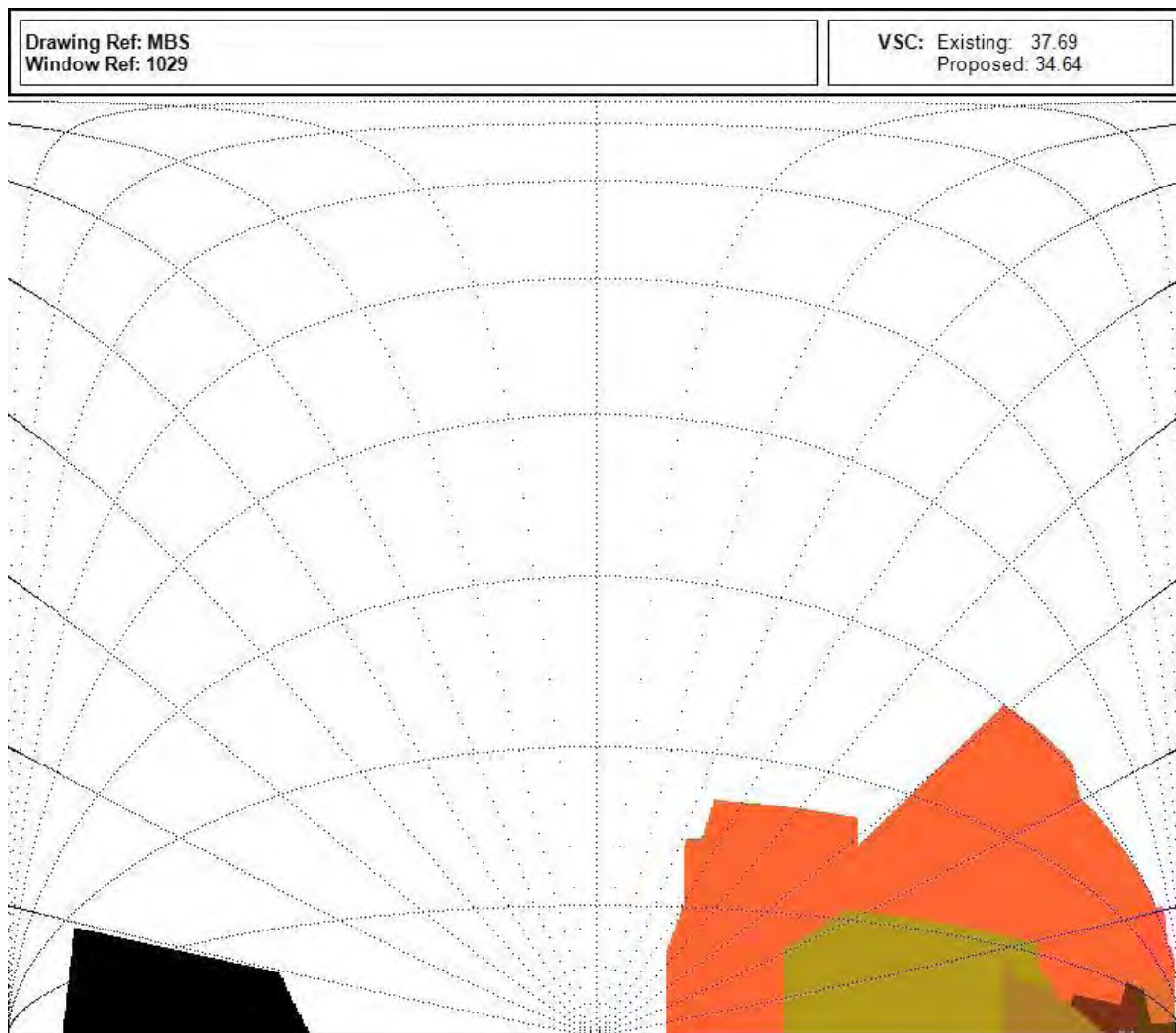


Surface 28 - 1 to 53 Nicholson Court - FF



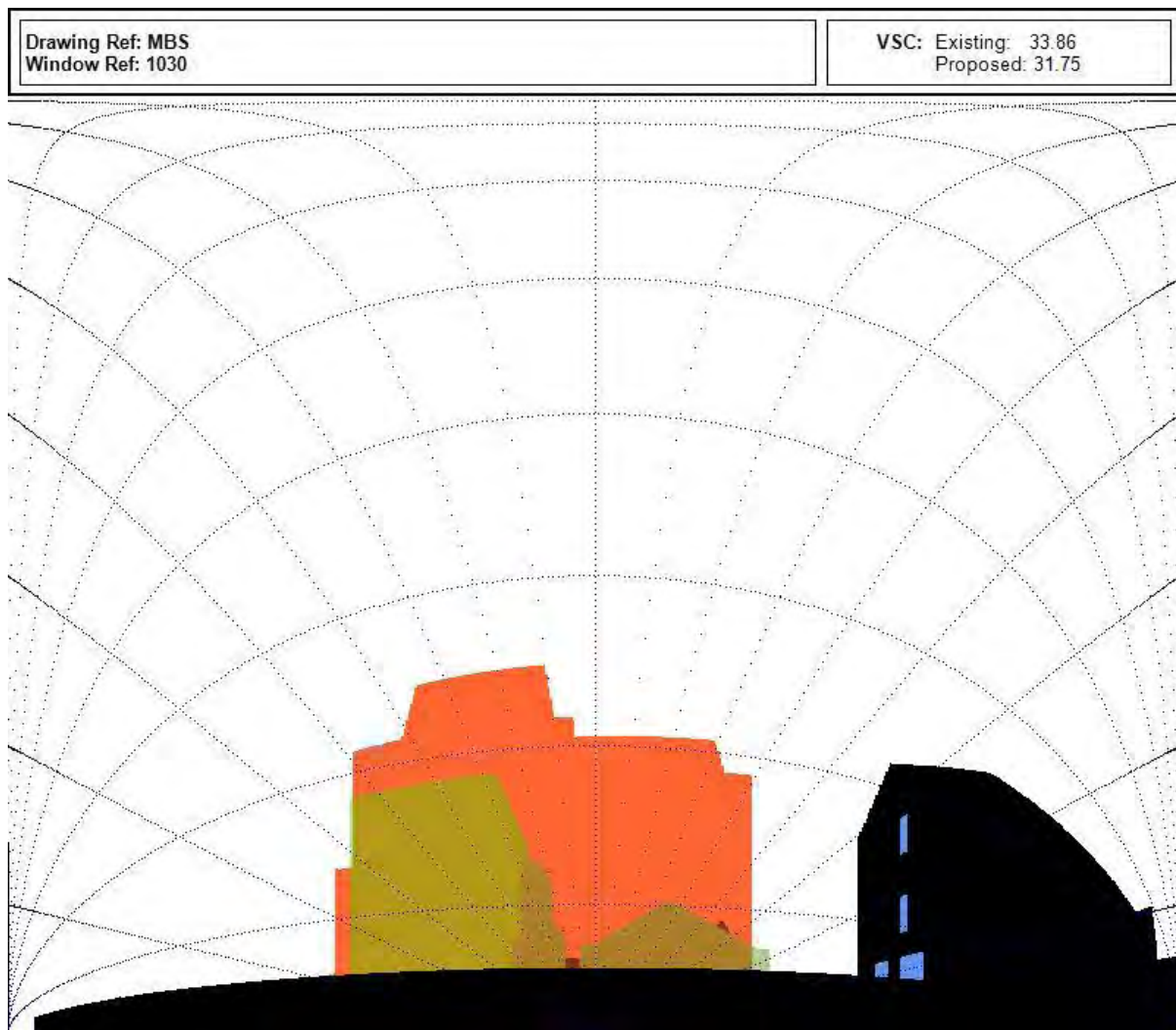
The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

Surface 29 - 1 to 53 Nicholson Court - SF



The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

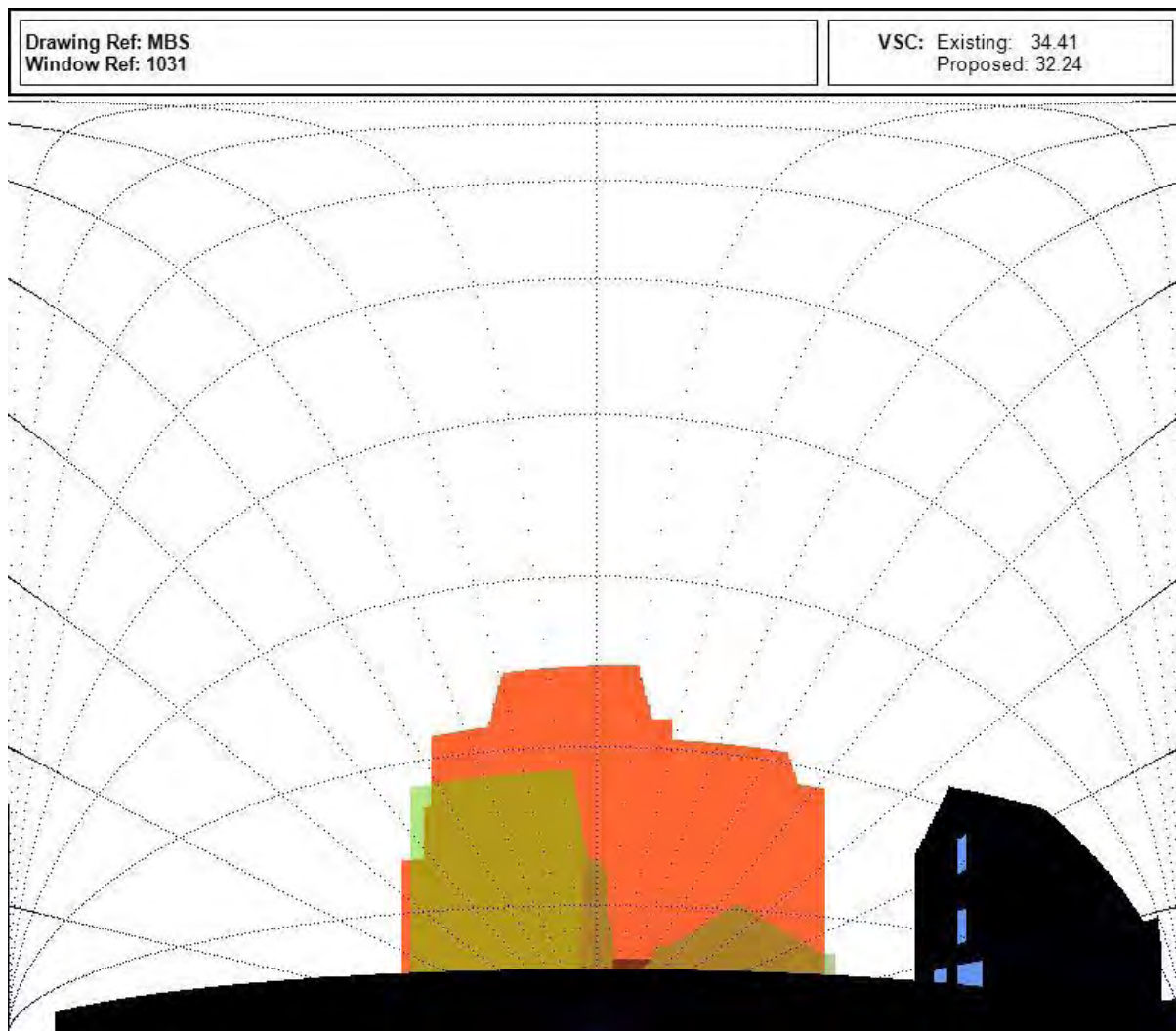
Surface 30 - 413 High Road - GF



The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.



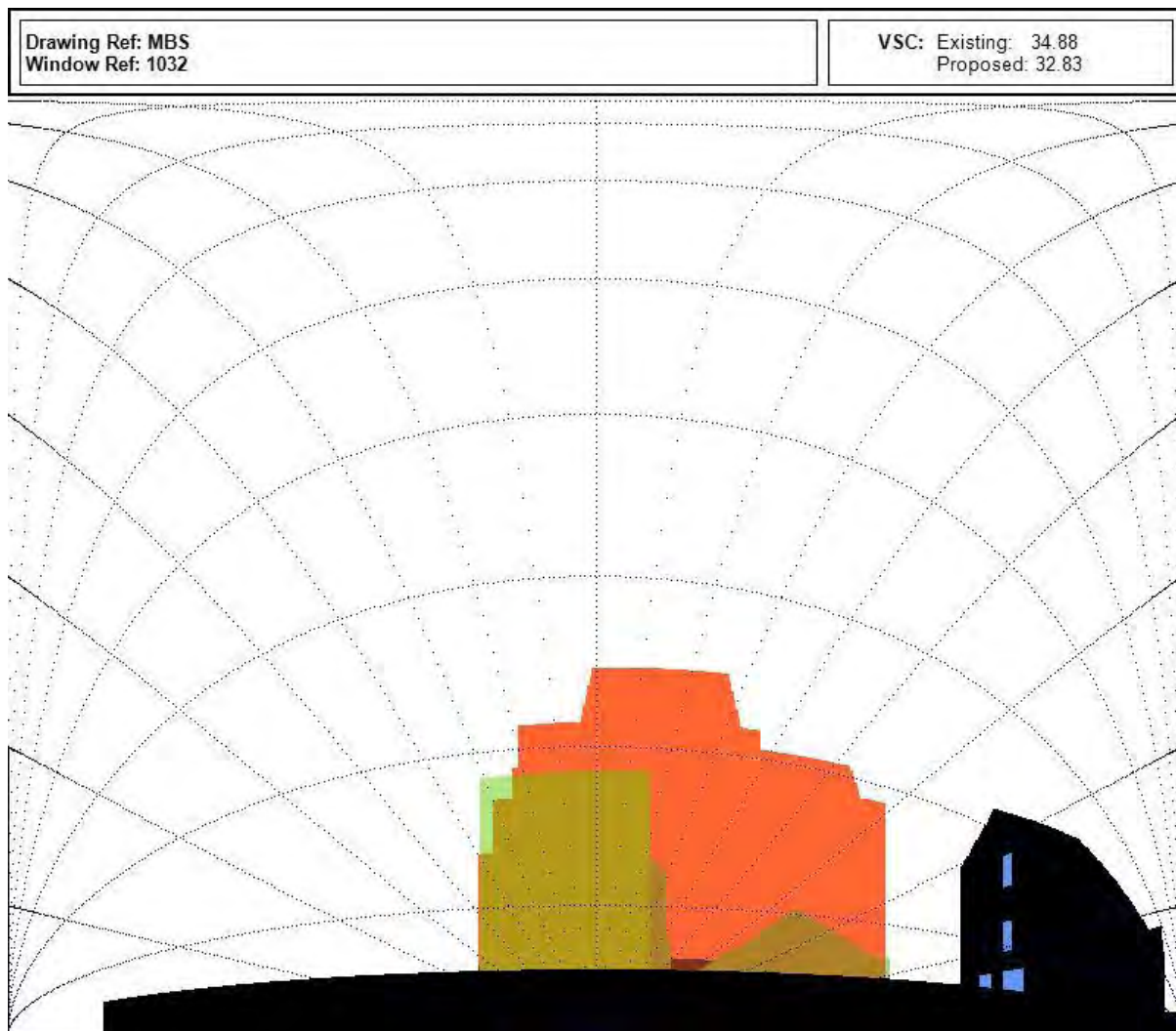
Surface 31 - High Road 413 - GF



The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

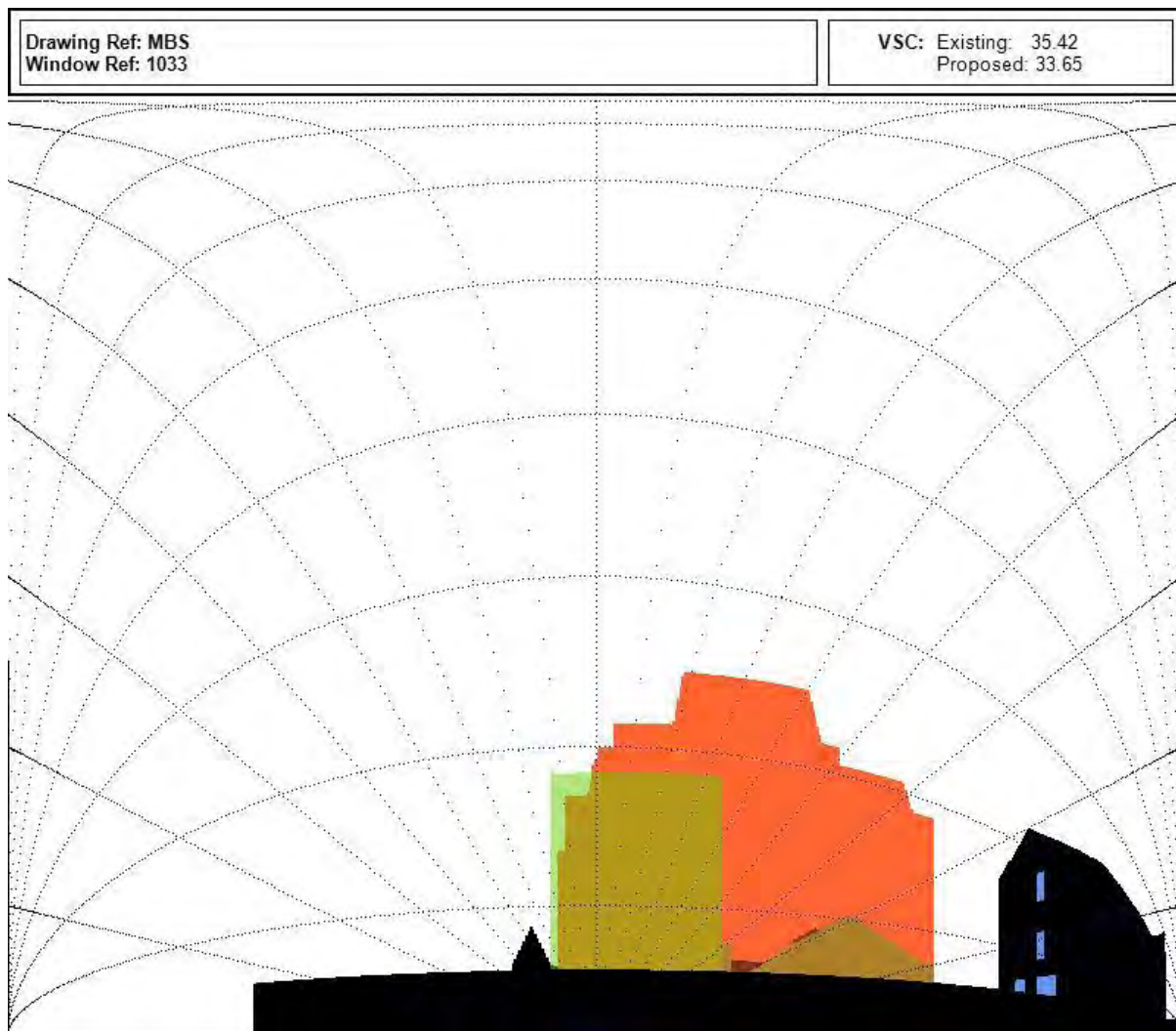


Surface 32 - High Road 413 - GF



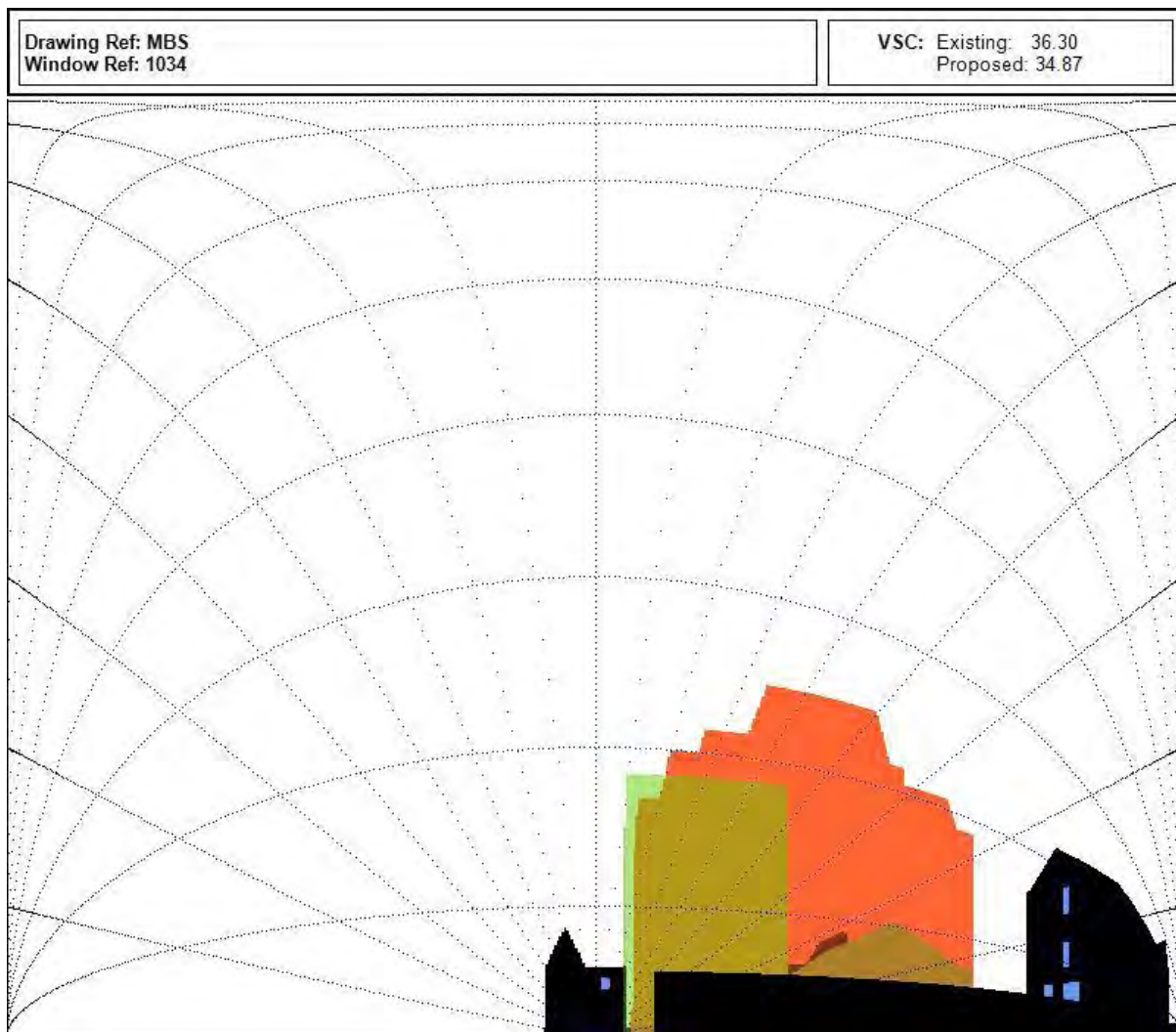
The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

Surface 33 - High Road 413 - GF



The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

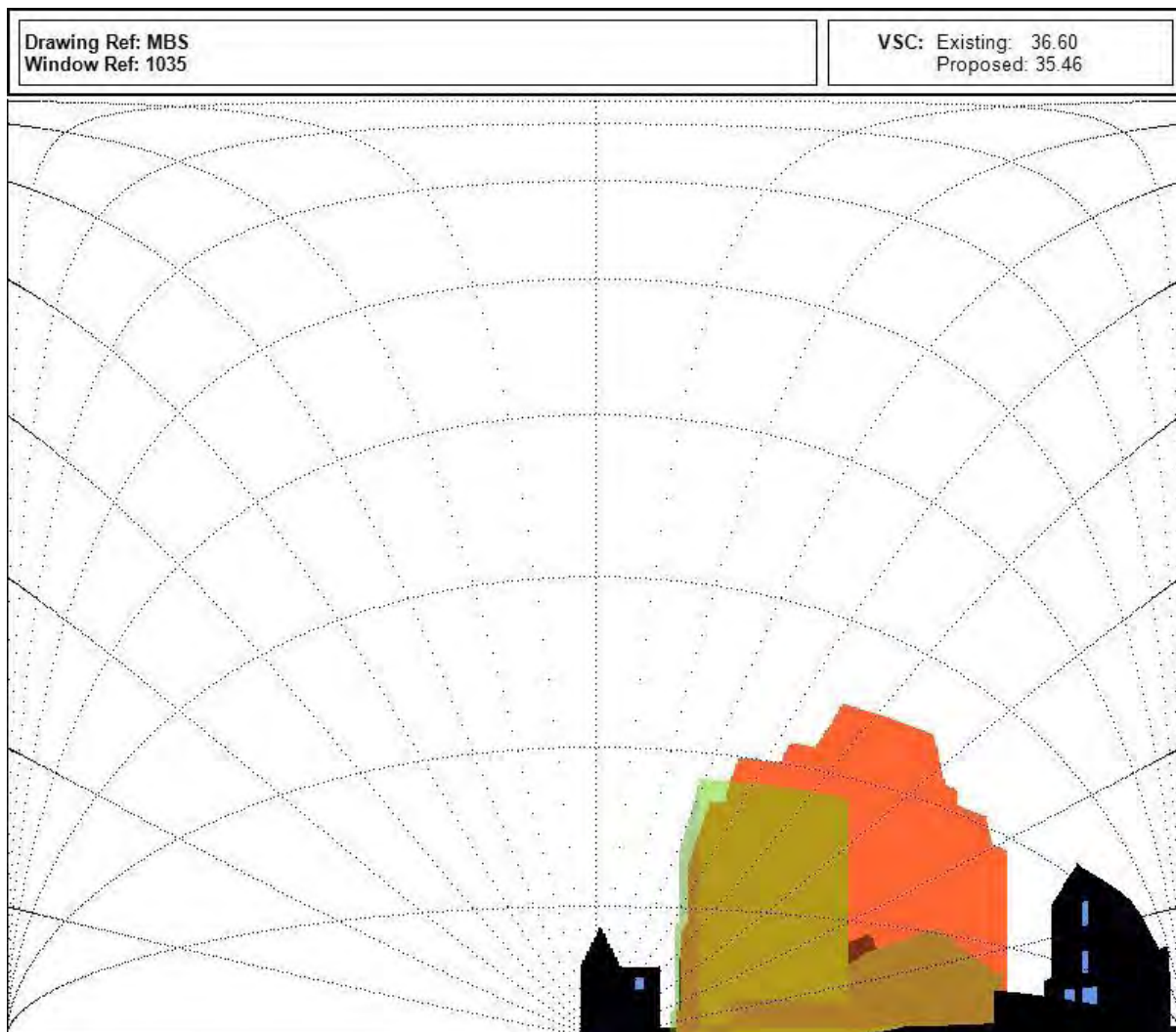
Surface 34 - High Road 413 - GF



The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.



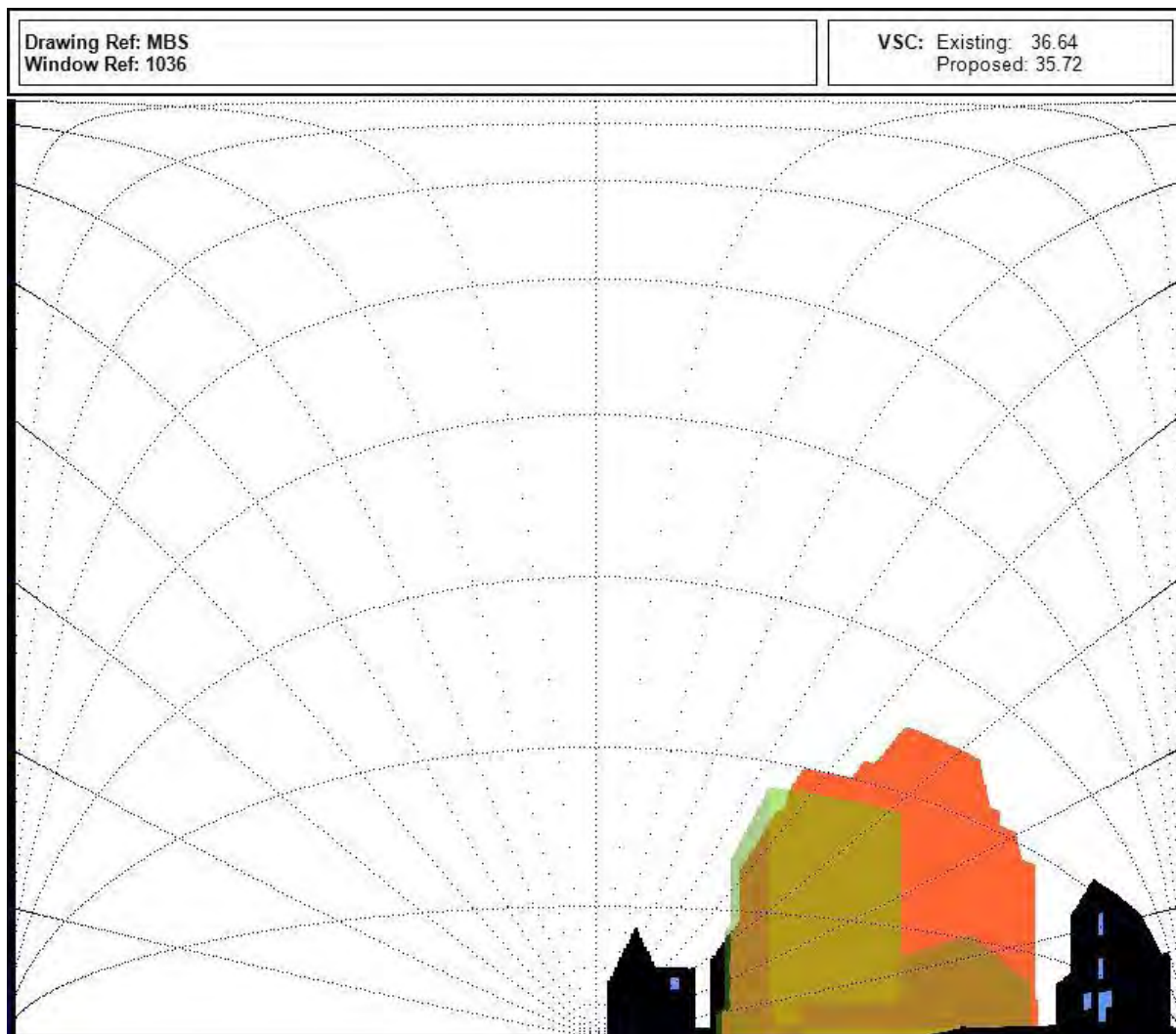
Surface 35 - High Road 413 - GF



The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.



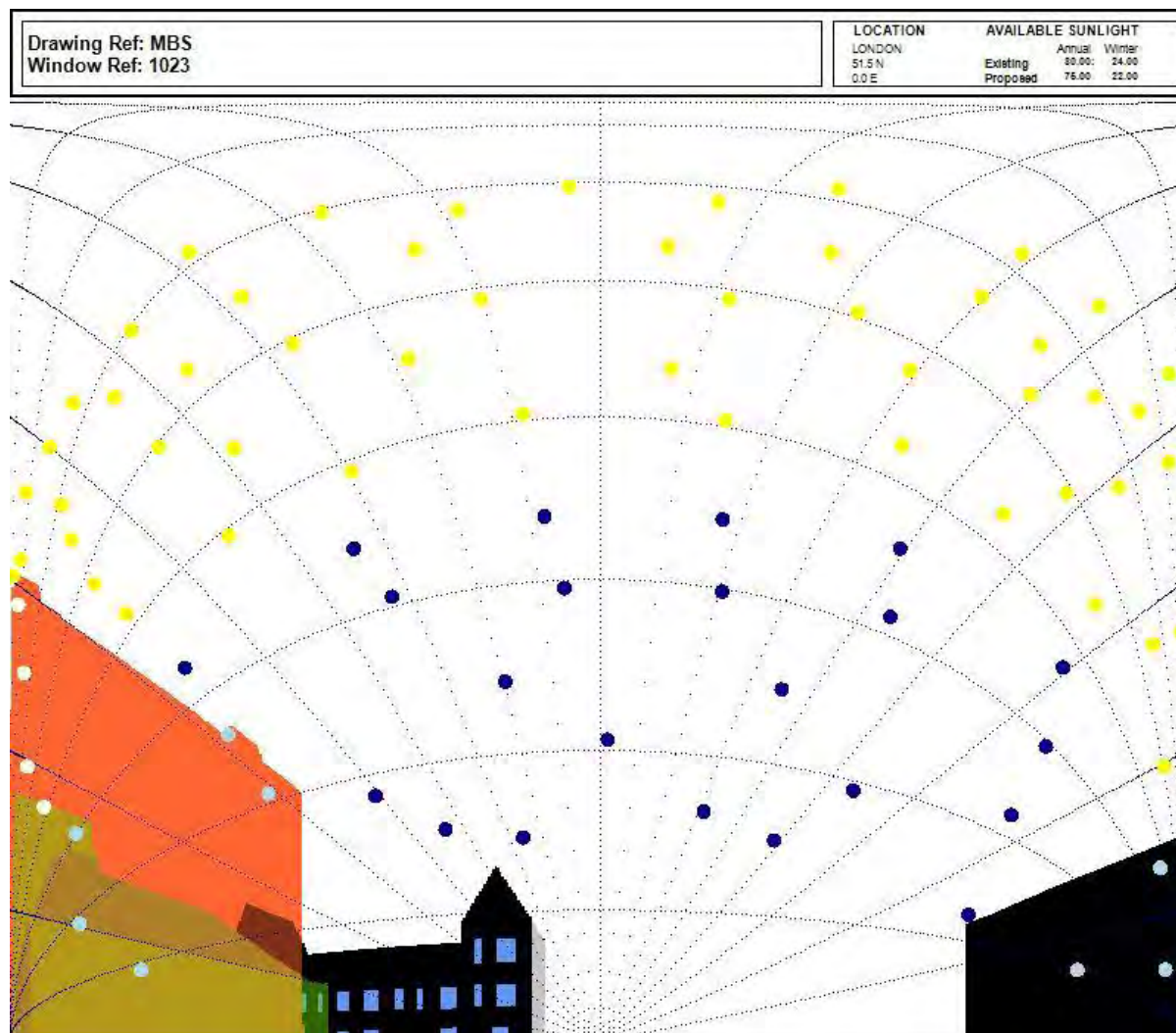
Surface 36 - High Road 413 - GF



The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

## 9.7. Sunlight results

Surface 23 - 1 to 53 Nicholson Court - GF



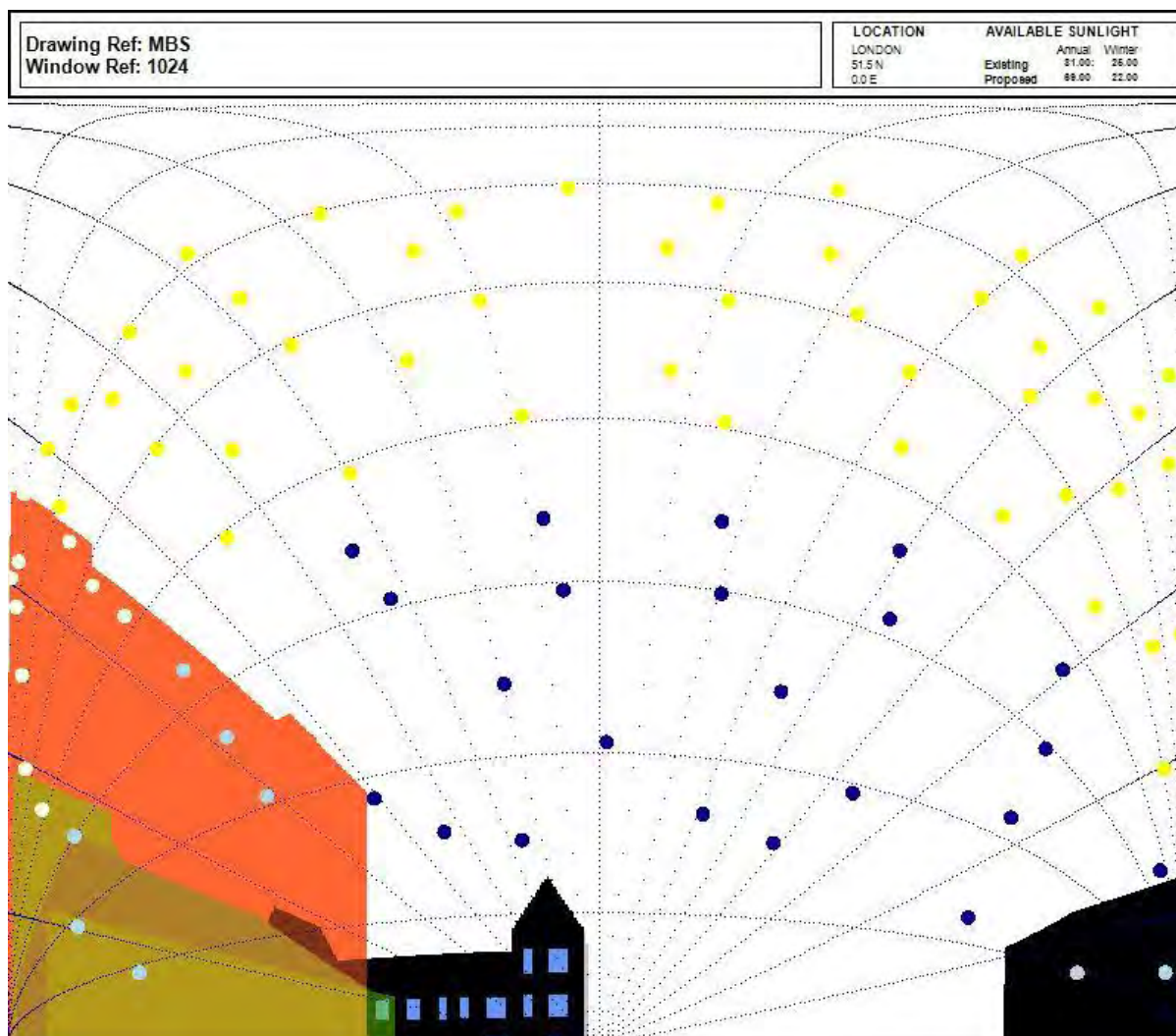
The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

The yellow dot represents the available sunlight during the summer months (Summer).  
 The blue dot represent the available sunlight during the winter months (Winter).  
 The sum of the yellow and blue dots give the available sunlight for the whole year (Annual).

The white dot represents the sunlight blocked by buildings.



Surface 24 - 1 to 53 Nicholson Court - GF

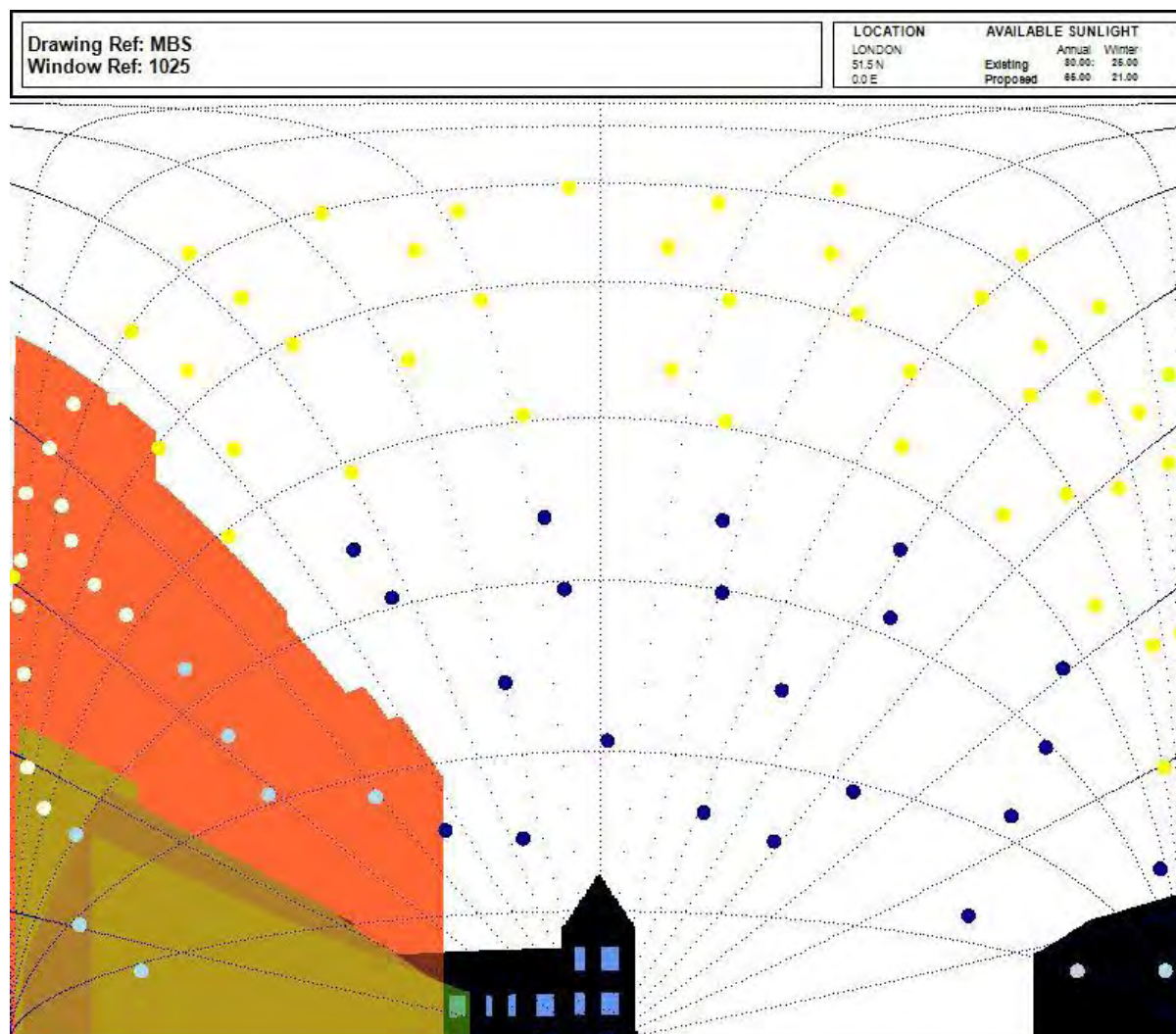


The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

The yellow dot represents the available sunlight during the summer months (Summer).  
 The blue dot represent the available sunlight during the winter months (Winter).  
 The sum of the yellow and blue dots give the available sunlight for the whole year (Annual).

The white dot represents the sunlight blocked by buildings.

Surface 25 - 1 to 53 Nicholson Court - GF



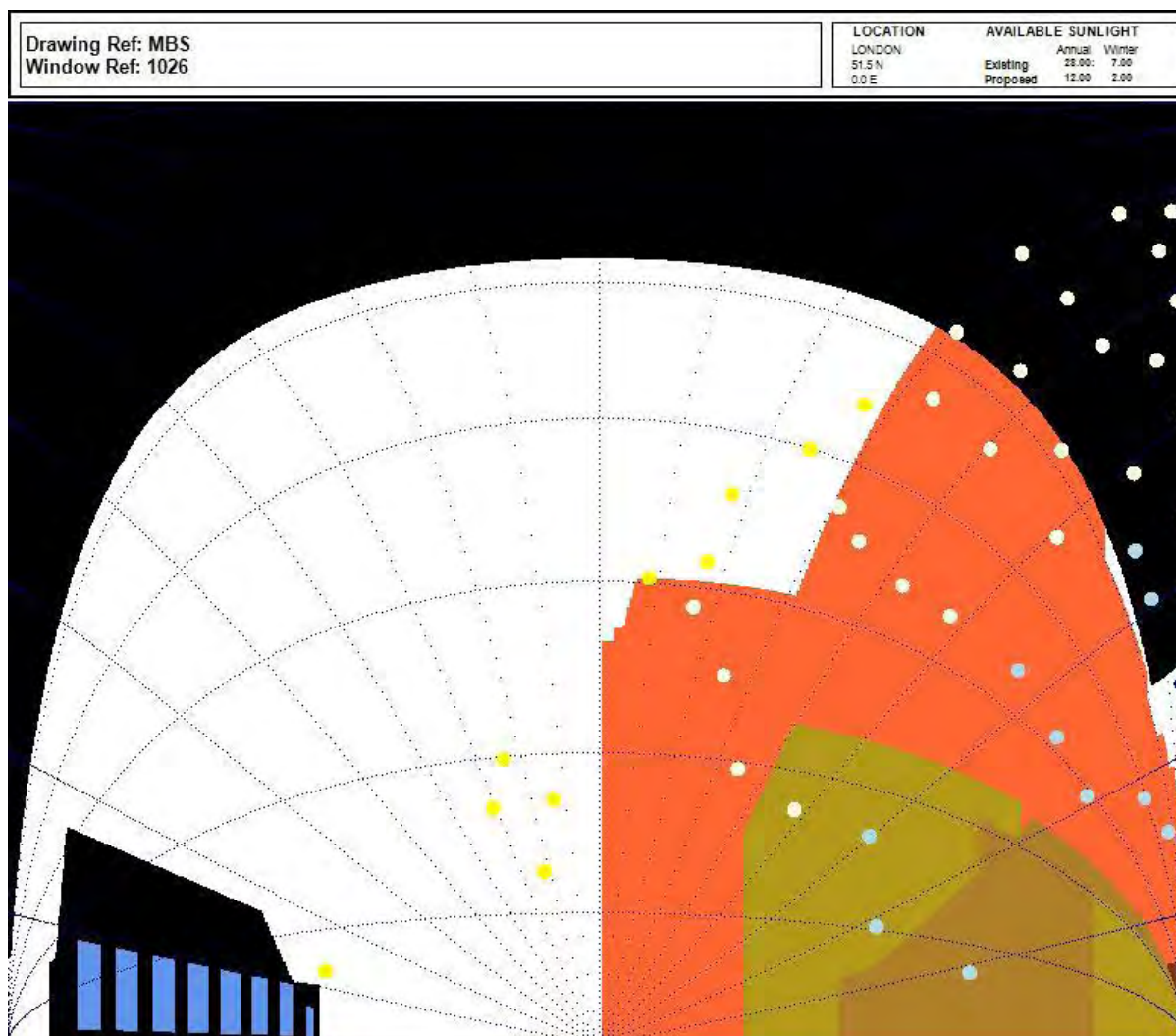
The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

The yellow dot represents the available sunlight during the summer months (Summer).  
 The blue dot represent the available sunlight during the winter months (Winter).  
 The sum of the yellow and blue dots give the available sunlight for the whole year (Annual).

The white dot represents the sunlight blocked by buildings.



Surface 26 - 1 to 53 Nicholson Court - GF

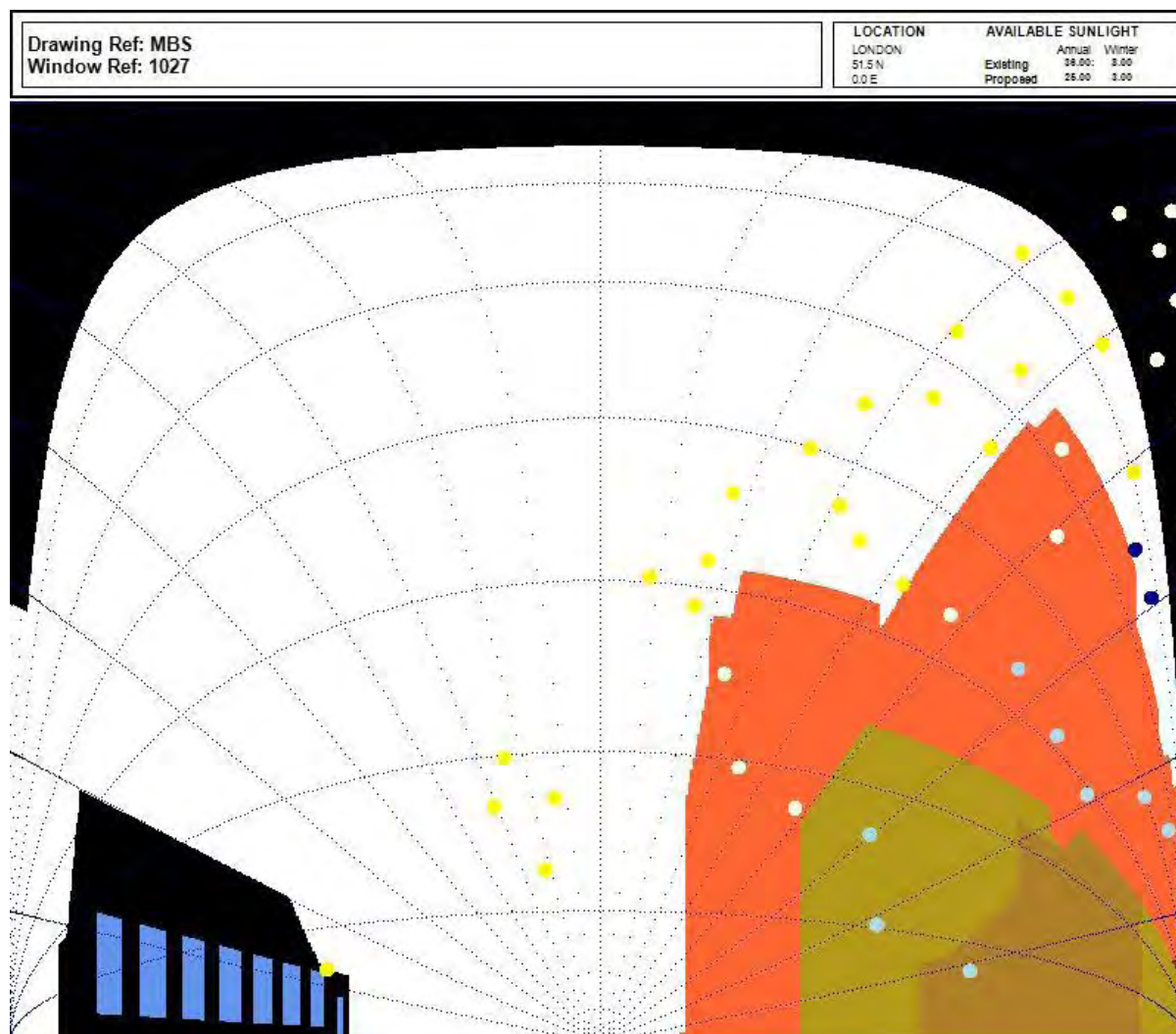


The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

The yellow dot represents the available sunlight during the summer months (Summer).  
 The blue dot represent the available sunlight during the winter months (Winter).  
 The sum of the yellow and blue dots give the available sunlight for the whole year (Annual).

The white dot represents the sunlight blocked by buildings

Surface 27 - 1 to 53 Nicholson Court - GF



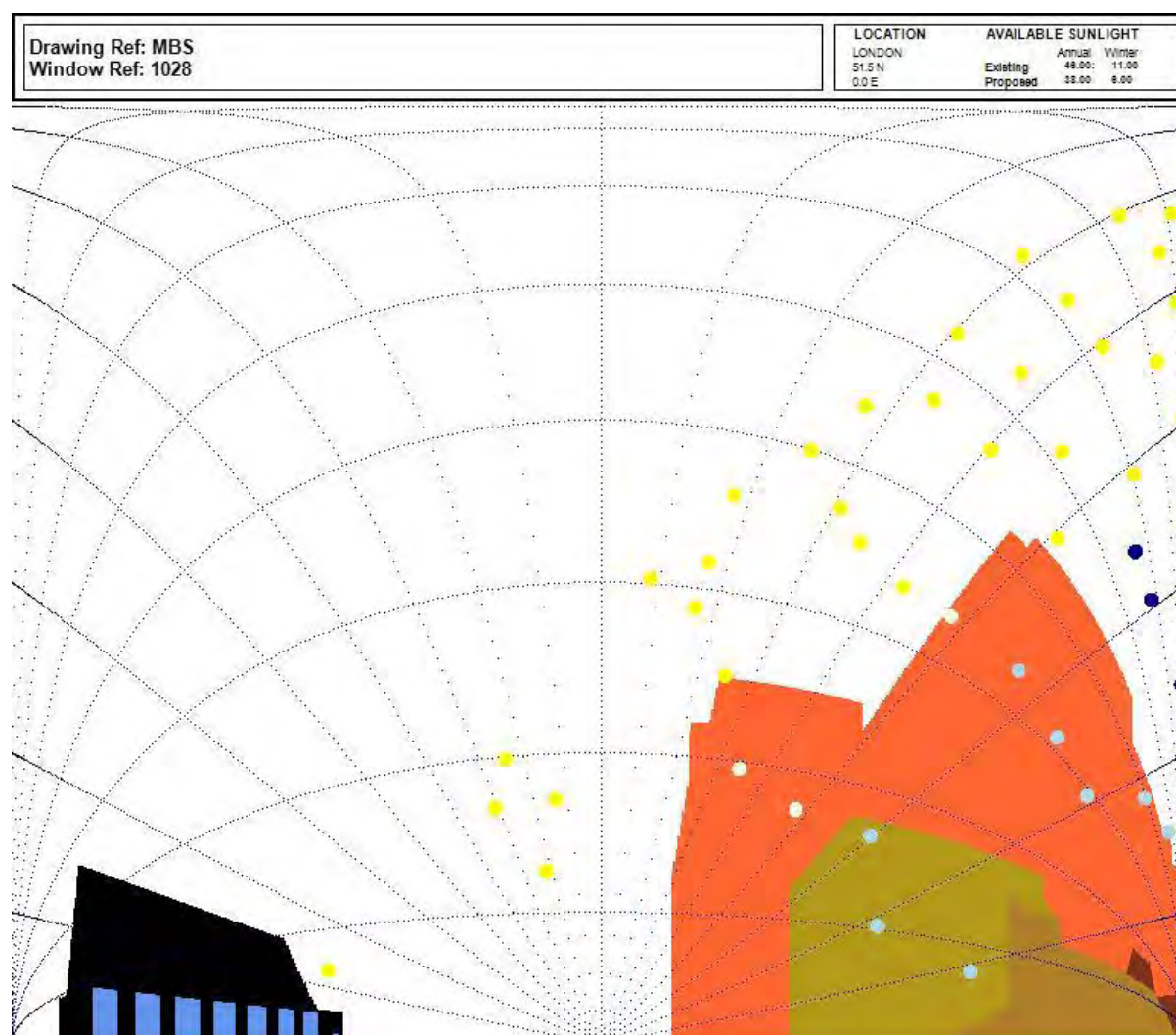
The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

The yellow dot represents the available sunlight during the summer months (Summer).  
 The blue dot represent the available sunlight during the winter months (Winter).  
 The sum of the yellow and blue dots give the available sunlight for the whole year (Annual).

The white dot represents the sunlight blocked by buildings



# Surface 28 - 1 to 53 Nicholson Court - FF

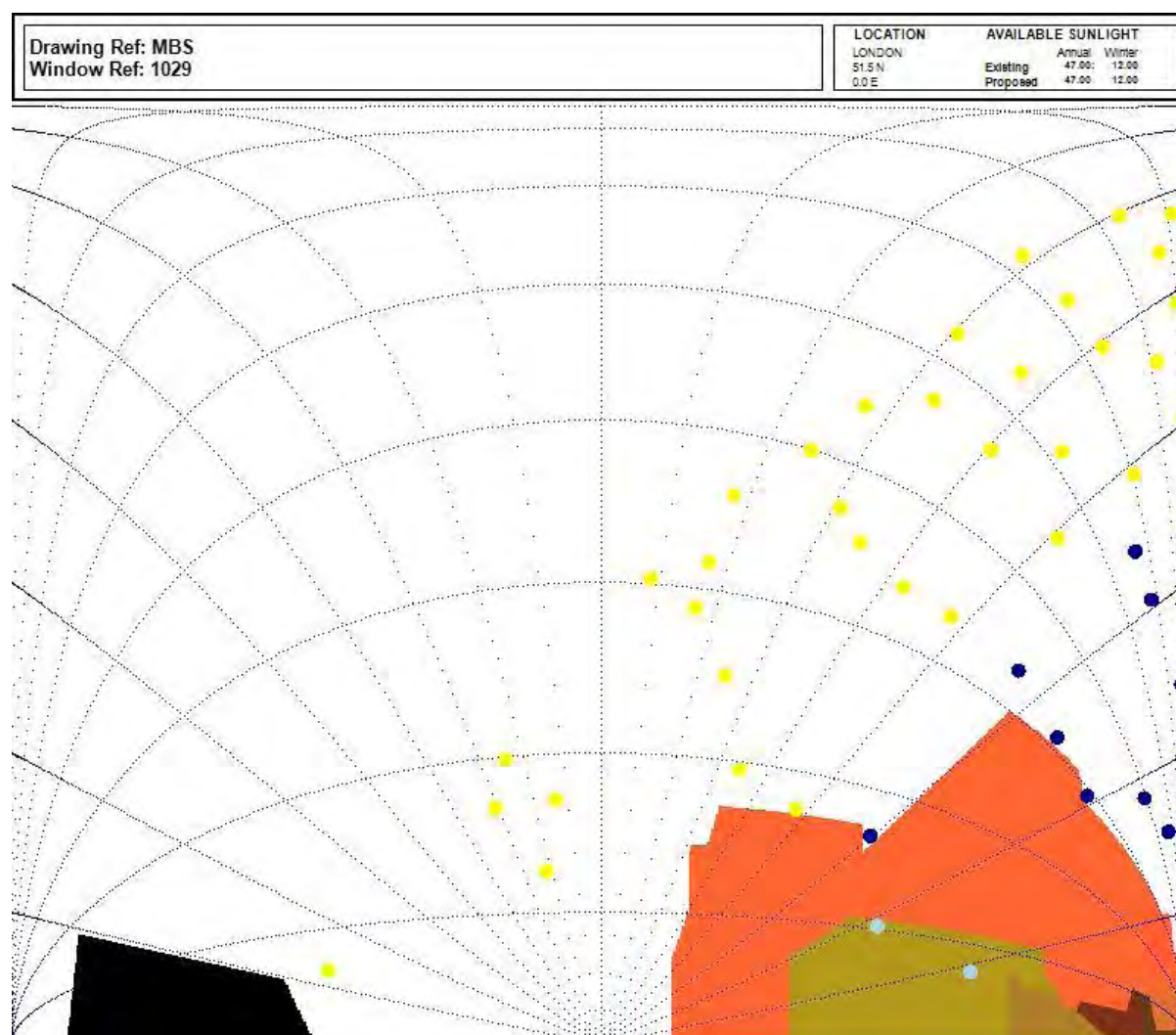


The green contour represents the existing building.  
The orange contour represents the proposed building.  
The black contour represents the surrounding buildings.

The yellow dot represents the available sunlight during the summer months (Summer).  
The blue dot represent the available sunlight during the winter months (Winter).  
The sum of the yellow and blue dots give the available sunlight for the whole year (Annual).

The white dot represents the sunlight blocked by buildings

# Surface 29 - 1 to 53 Nicholson Court - SF



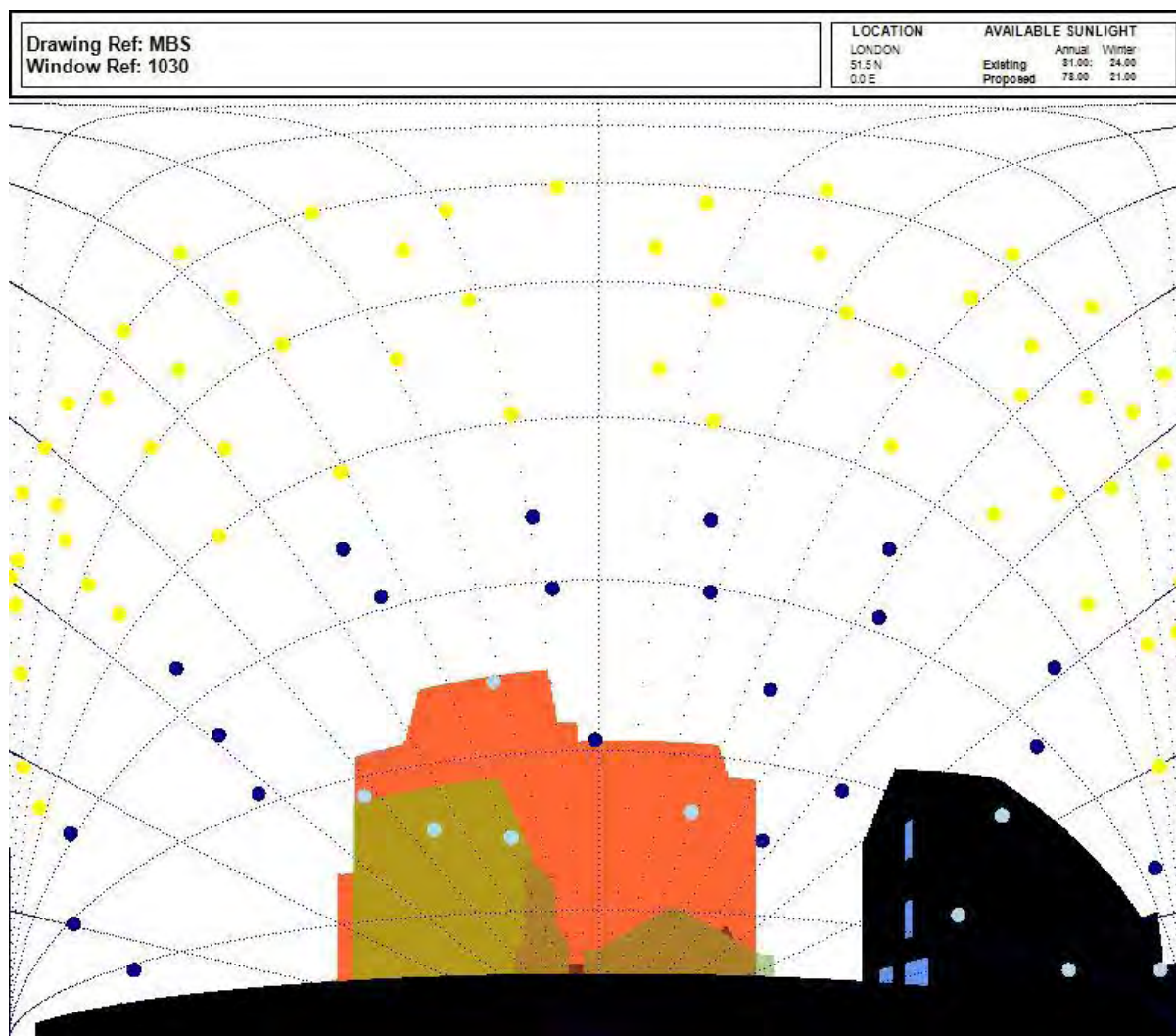
The green contour represents the existing building.  
The orange contour represents the proposed building.  
The black contour represents the surrounding buildings.

The yellow dot represents the available sunlight during the summer months (Summer).  
The blue dot represent the available sunlight during the winter months (Winter).  
The sum of the yellow and blue dots give the available sunlight for the whole year (Annual).

The white dot represents the sunlight blocked by buildings



Surface 30 - 413 High Road - GF

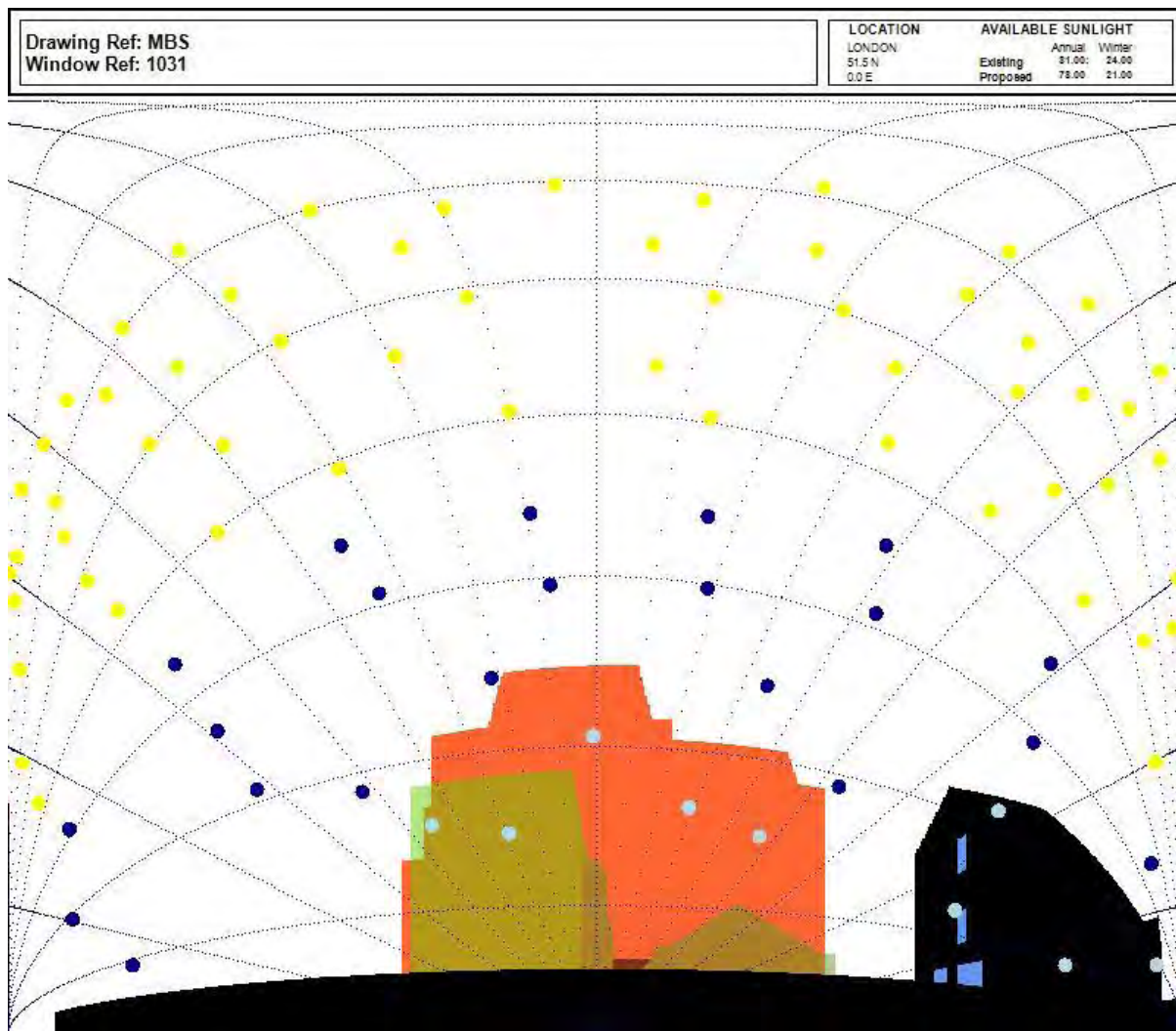


The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

The yellow dot represents the available sunlight during the summer months (Summer).  
 The blue dot represent the available sunlight during the winter months (Winter).  
 The sum of the yellow and blue dots give the available sunlight for the whole year (Annual).

The white dot represents the sunlight blocked by buildings

Surface 31 - High Road 413 - GF



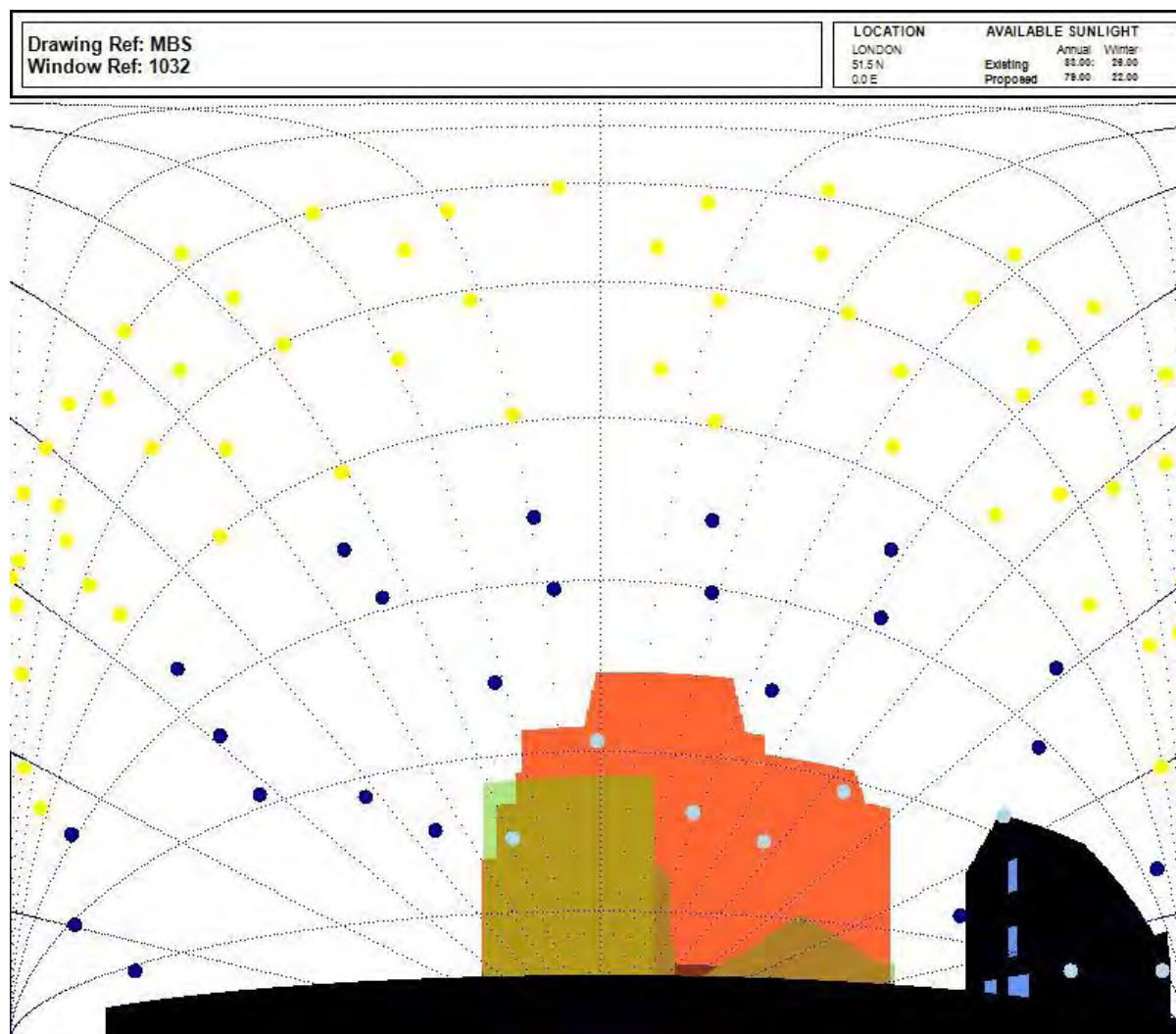
The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

The yellow dot represents the available sunlight during the summer months (Summer).  
 The blue dot represent the available sunlight during the winter months (Winter).  
 The sum of the yellow and blue dots give the available sunlight for the whole year (Annual).

The white dot represents the sunlight blocked by buildings



Surface 32 - High Road 413 - GF

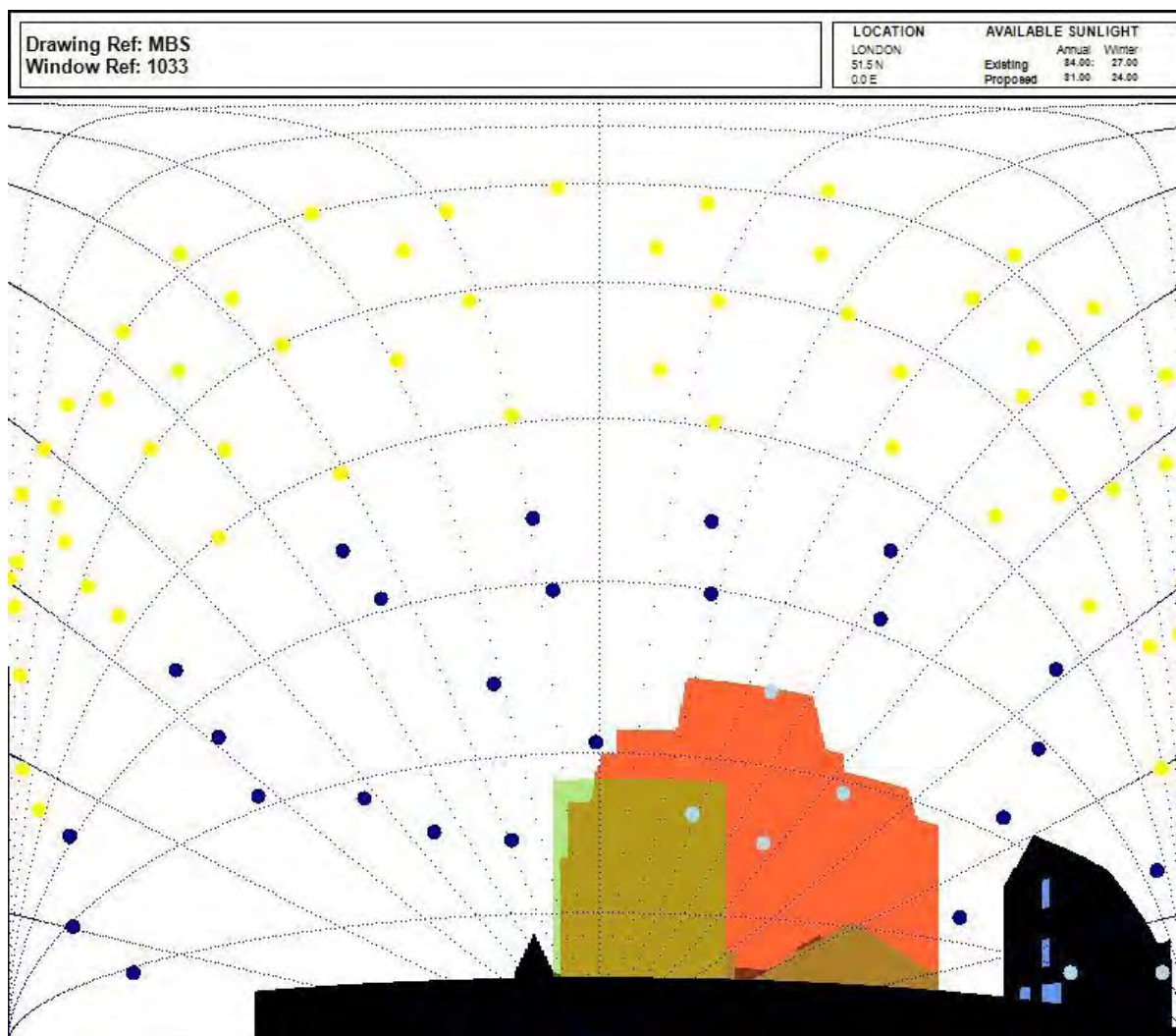


The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

The yellow dot represents the available sunlight during the summer months (Summer).  
 The blue dot represent the available sunlight during the winter months (Winter).  
 The sum of the yellow and blue dots give the available sunlight for the whole year (Annual).

The white dot represents the sunlight blocked by buildings

Surface 33 - High Road 413 - GF



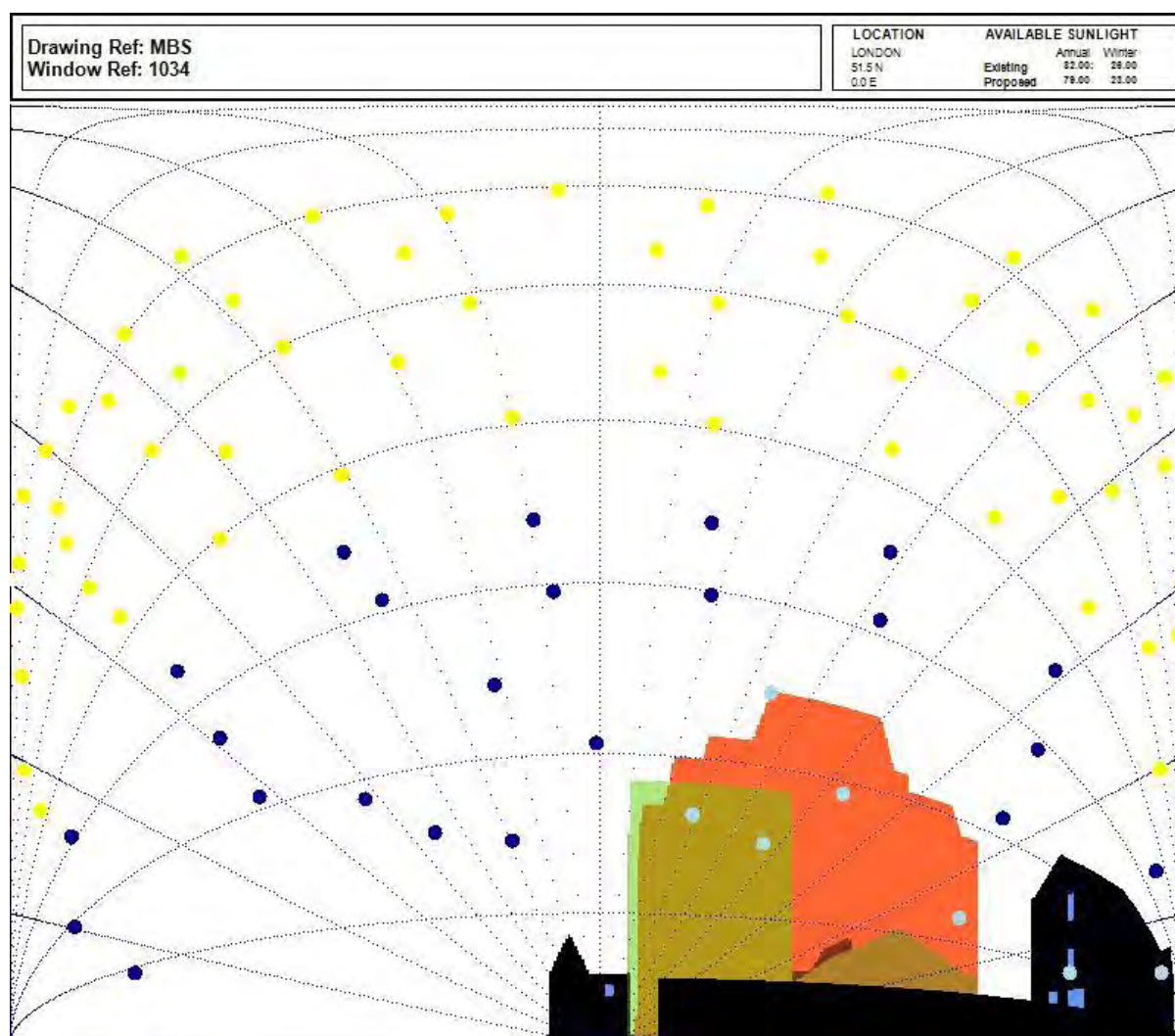
The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

The yellow dot represents the available sunlight during the summer months (Summer).  
 The blue dot represent the available sunlight during the winter months (Winter).  
 The sum of the yellow and blue dots give the available sunlight for the whole year (Annual).

The white dot represents the sunlight blocked by buildings



# Surface 34 - High Road 413 - GF

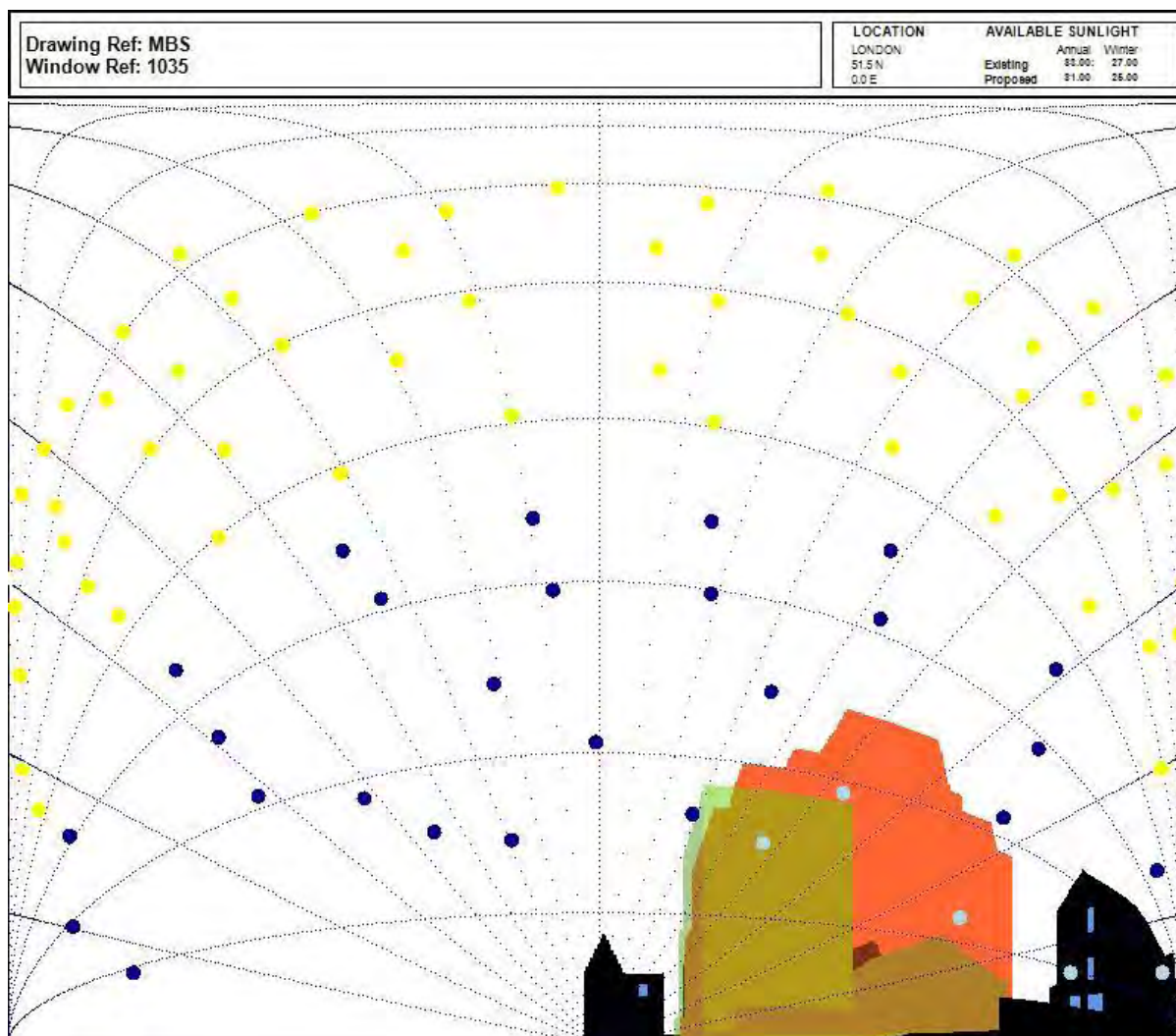


The green contour represents the existing building.  
The orange contour represents the proposed building.  
The black contour represents the surrounding buildings.

The yellow dot represents the available sunlight during the summer months (Summer).  
The blue dot represent the available sunlight during the winter months (Winter).  
The sum of the yellow and blue dots give the available sunlight for the whole year (Annual).

The white dot represents the sunlight blocked by buildings

Surface 35 - High Road 413 - GF



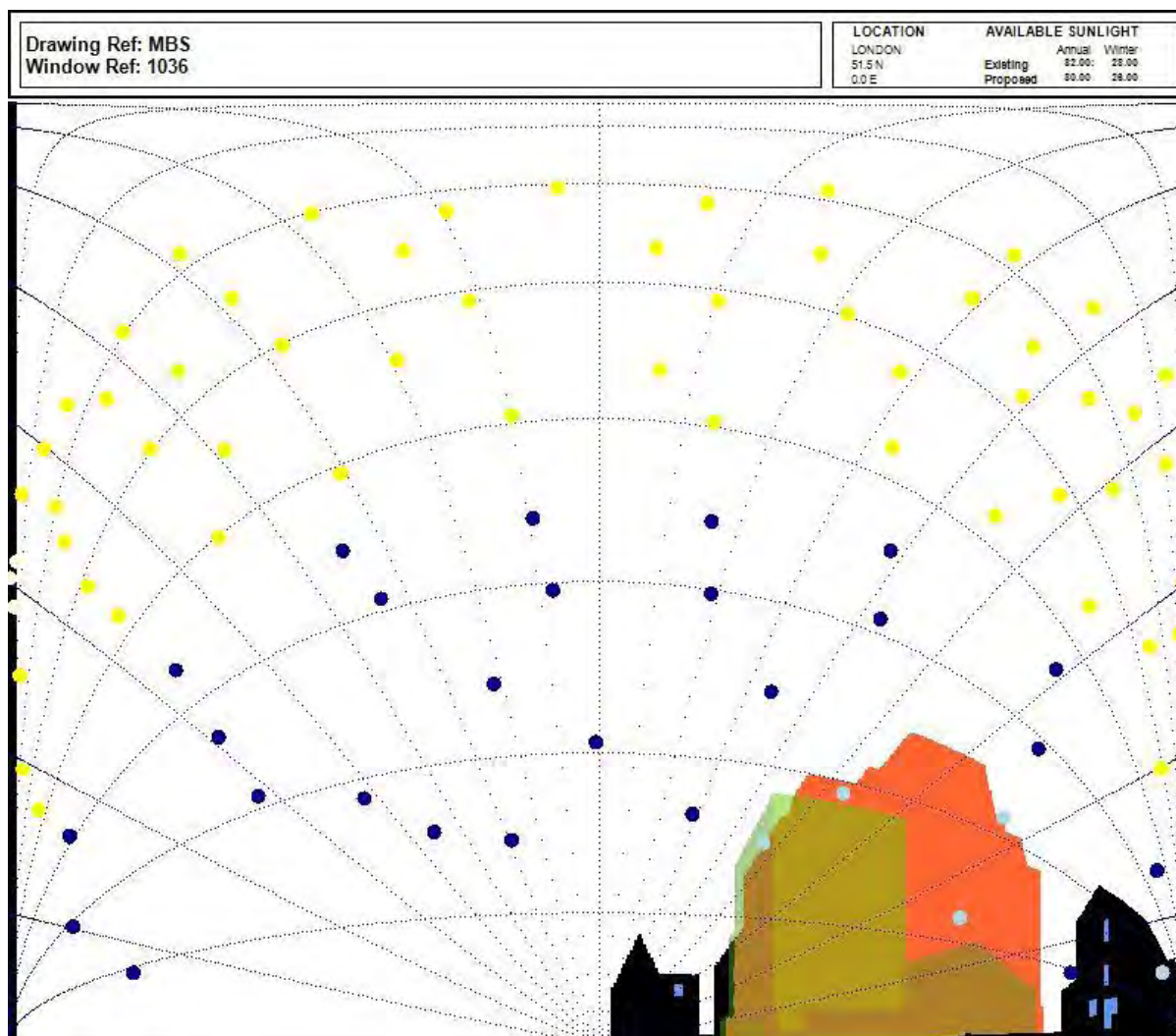
The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

The yellow dot represents the available sunlight during the summer months (Summer).  
 The blue dot represent the available sunlight during the winter months (Winter).  
 The sum of the yellow and blue dots give the available sunlight for the whole year (Annual).

The white dot represents the sunlight blocked by buildings



Surface 36 - High Road 413 - GF



The green contour represents the existing building.  
 The orange contour represents the proposed building.  
 The black contour represents the surrounding buildings.

The yellow dot represents the available sunlight during the summer months (Summer).  
 The blue dot represent the available sunlight during the winter months (Winter).  
 The sum of the yellow and blue dots give the available sunlight for the whole year (Annual).

The white dot represents the sunlight blocked by buildings

## 9.8. Overshadowing results and pictures (21<sup>st</sup> March)

Amenity 1 – Nicholson Court - Garden

The results are expressed as a percentage of area receiving direct sunlight on 21<sup>st</sup> March.

### Existing

Month	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00
Jan						1.00	56.00	85.10	94.40	87.20	74.10	56.60	37.00				
Feb					0.40	65.00	93.80	96.80	98.20	89.80	78.70	62.40	31.80	18.10			
<b>Mar</b>				<b>23.30</b>	<b>77.10</b>	<b>96.90</b>	<b>100.00</b>	<b>100.00</b>	<b>98.90</b>	<b>91.00</b>	<b>81.90</b>	<b>69.60</b>	<b>48.40</b>	<b>10.60</b>	<b>0.00</b>		
Apr		18.70	16.20	69.60	95.30	100.00	100.00	100.00	98.50	91.90	84.40	75.00	60.80	32.00	0.00		
May		21.70	53.10	91.70	99.50	100.00	100.00	100.00	98.70	92.80	86.40	78.70	68.10	46.80	13.40	0.00	
Jun	22.20	28.10	60.70	93.60	99.90	100.00	100.00	100.00	99.30	93.80	87.80	80.70	71.50	52.70	25.50	0.00	0.00
Jul		21.00	44.40	89.90	98.90	100.00	100.00	100.00	99.60	93.80	87.60	80.20	70.30	51.40	20.70	0.00	
Aug			16.60	66.80	94.80	100.00	100.00	100.00	98.90	92.30	85.00	75.80	62.20	35.80	0.00	0.00	
Sep			9.60	38.60	85.40	99.30	100.00	100.00	96.90	88.90	79.20	65.50	39.80	7.60			
Oct				2.30	25.00	83.70	95.70	97.00	94.50	84.40	71.20	49.00	24.80				
Nov					0.00	18.00	72.50	88.00	93.70	82.20	67.50	48.30					
Dec						4.00	44.40	79.10	94.00	84.50	71.50	54.80					



## Proposed

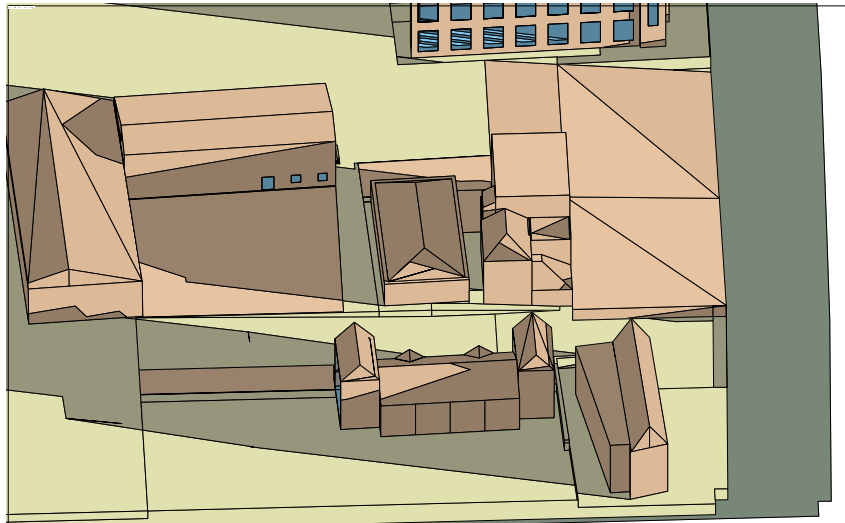
The results are expressed as a percentage of area receiving direct sunlight on 21<sup>st</sup> March.

Month	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00
Jan						0.20	52.50	84.40	93.70	88.90	76.20	60.00	40.20				
Feb					1.10	54.40	84.20	96.20	98.40	91.10	80.10	64.40	34.70	20.50			
<b>Mar</b>				<b>24.90</b>	<b>45.70</b>	<b>76.80</b>	<b>93.70</b>	<b>100.00</b>	<b>99.90</b>	<b>92.00</b>	<b>82.90</b>	<b>70.80</b>	<b>50.00</b>	<b>12.80</b>	<b>0.90</b>		
Apr		1.40	0.00	23.80	66.90	87.80	99.40	100.00	99.20	92.50	85.10	75.60	61.50	34.30	0.00		
May		11.00	1.60	48.40	77.30	93.00	100.00	100.00	99.20	93.30	86.90	79.10	68.40	48.00	13.20	0.00	
Jun	6.20	14.70	9.90	52.70	79.00	93.60	100.00	100.00	99.80	94.20	88.20	81.10	71.80	53.90	26.10	0.00	0.00
Jul		13.50	1.20	42.30	74.30	91.10	99.90	100.00	100.00	94.30	88.00	80.60	70.60	52.60	21.20	0.00	
Aug			0.00	19.70	65.30	86.90	99.10	100.00	99.60	93.00	85.60	76.40	62.90	37.30	0.00	0.00	
Sep			4.00	29.20	56.40	82.30	97.00	100.00	97.80	89.80	80.30	66.70	41.70	9.70			
Oct				12.80	19.40	73.10	91.10	96.90	95.70	85.80	72.90	51.60	27.40				
Nov					0.00	17.30	68.60	87.40	94.50	84.10	70.00	52.20					
Dec						2.00	40.30	77.50	92.90	86.40	73.90	58.30					

Overshadowing assessment		
% of the amenity area receiving direct sunlight on 21 <sup>st</sup> March		
Existing	Proposed	Ratio
66.47	62.53	0.94

Suncast image:

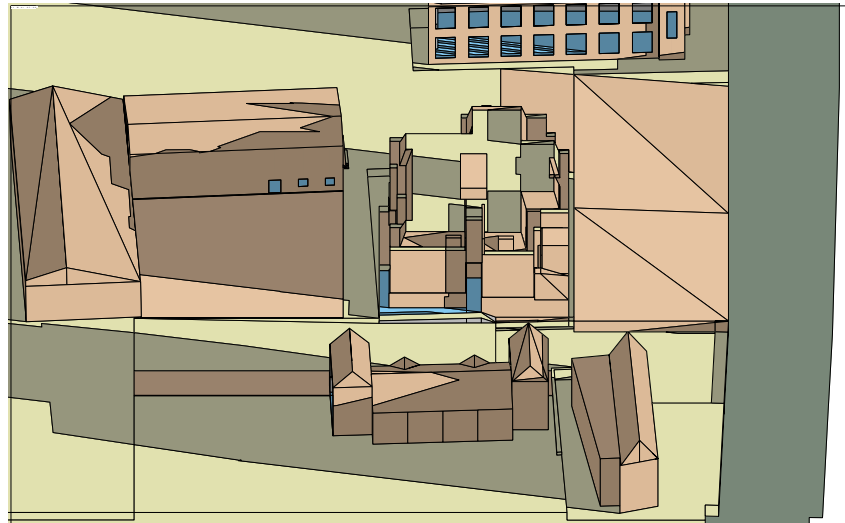
View time = 21 Mar 07:00  
Site Latitude = 51.59  
Longitude diff. = -0.07  
Model Bearing = 357.70  
Sun: azi = 100.48 alt = 7.69  
Eye: azi = 180.00 alt = 40.00



**Existing**

Suncast image:

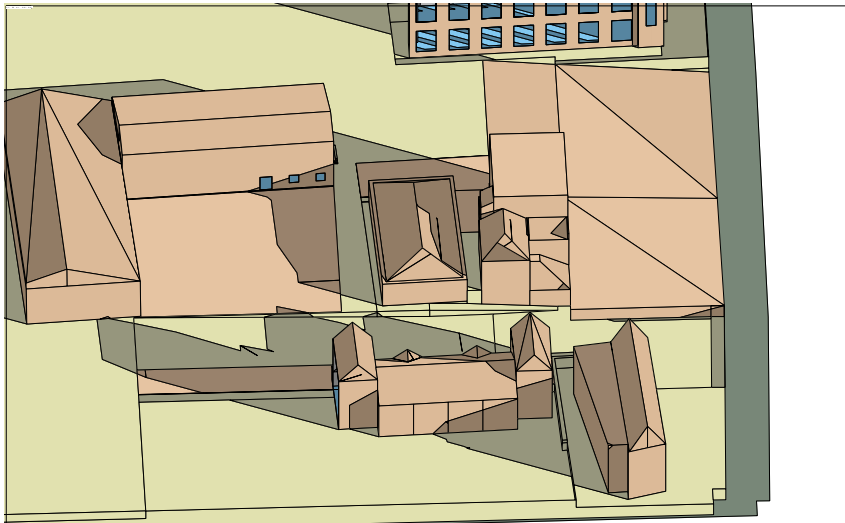
View time = 21 Mar 07:00  
Site Latitude = 51.59  
Longitude diff. = -0.07  
Model Bearing = 0.00  
Sun: azi = 100.48 alt = 7.69  
Eye: azi = 180.00 alt = 40.00



**Proposed**

Suncast image:

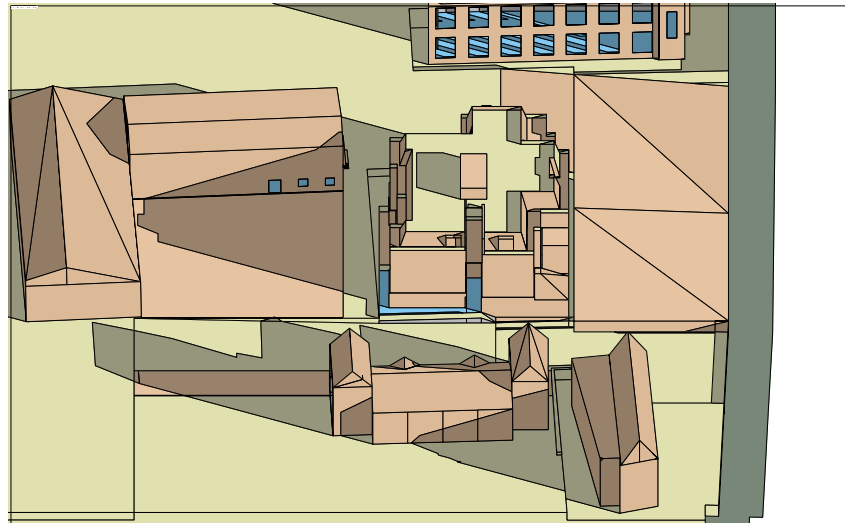
View time = 21 Mar 08:00  
Site Latitude = 51.59  
Longitude diff. = -0.07  
Model Bearing = 357.70  
Sun: azi = 112.84 alt = 16.61  
Eye: azi = 180.00 alt = 40.00



**Existing**

Suncast image:

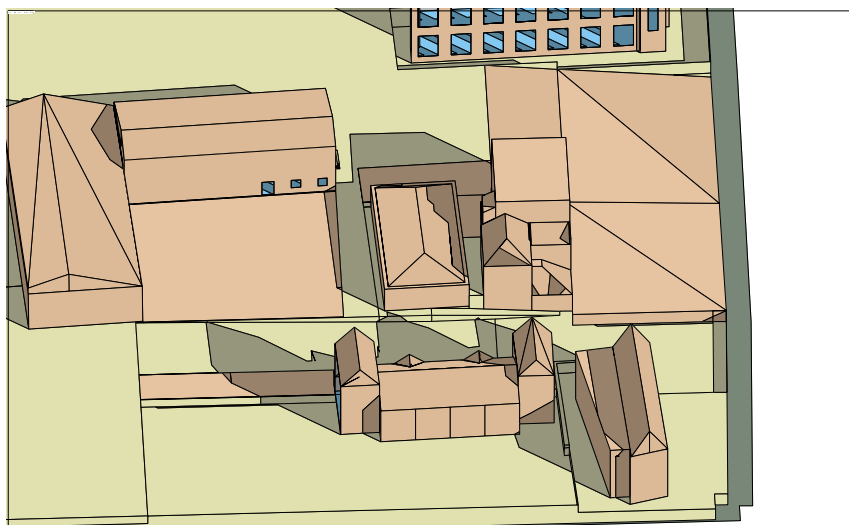
View time = 21 Mar 08:00  
Site Latitude = 51.59  
Longitude diff. = -0.07  
Model Bearing = 0.00  
Sun: azi = 112.84 alt = 16.61  
Eye: azi = 180.00 alt = 40.00



**Proposed**

Suncast image:

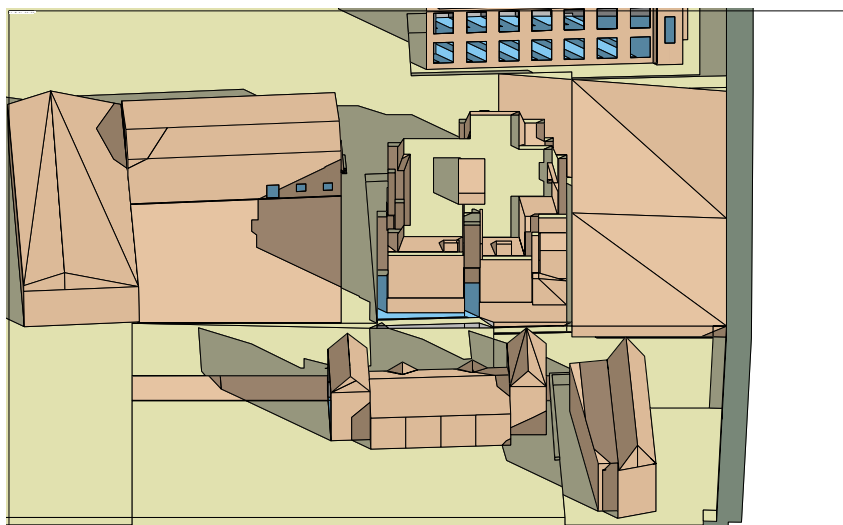
View time = 21 Mar 09:00  
Site Latitude = 51.59  
Longitude diff. = -0.07  
Model Bearing = 357.70  
Sun: azi = 126.35 alt = 24.70  
Eye: azi = 180.00 alt = 40.00



**Existing**

Suncast image:

View time = 21 Mar 09:00  
Site Latitude = 51.59  
Longitude diff. = -0.07  
Model Bearing = 0.00  
Sun: azi = 126.35 alt = 24.70  
Eye: azi = 180.00 alt = 40.00

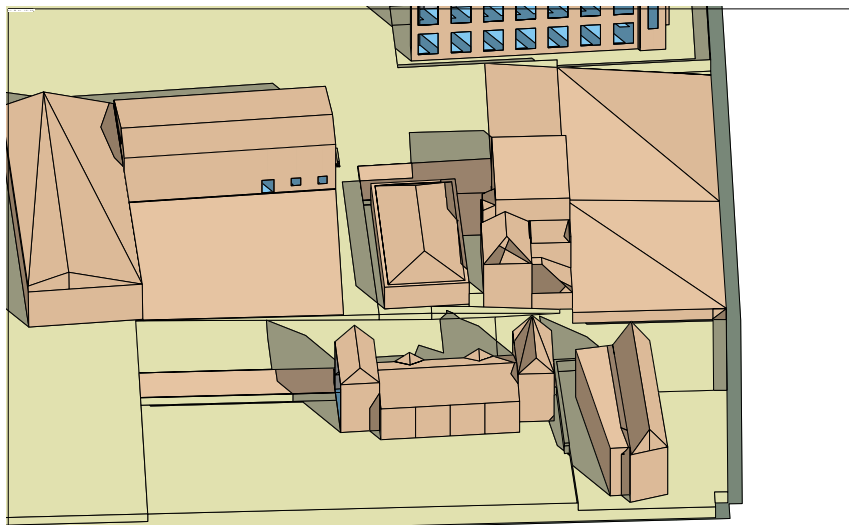


**Proposed**



Suncast image:

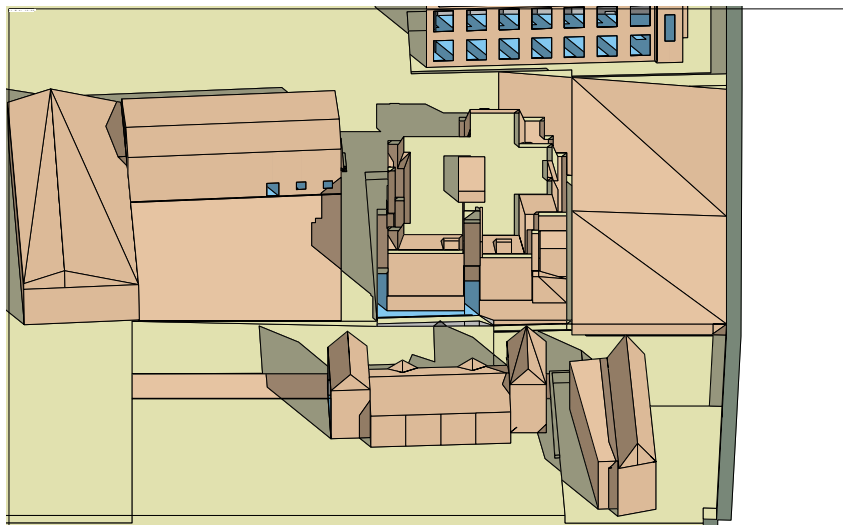
View time = 21 Mar 10:00  
Site Latitude = 51.59  
Longitude diff. = -0.07  
Model Bearing = 357.70  
Sun: azi = 141.58 alt = 31.41  
Eye: azi = 180.00 alt = 40.00



**Existing**

Suncast image:

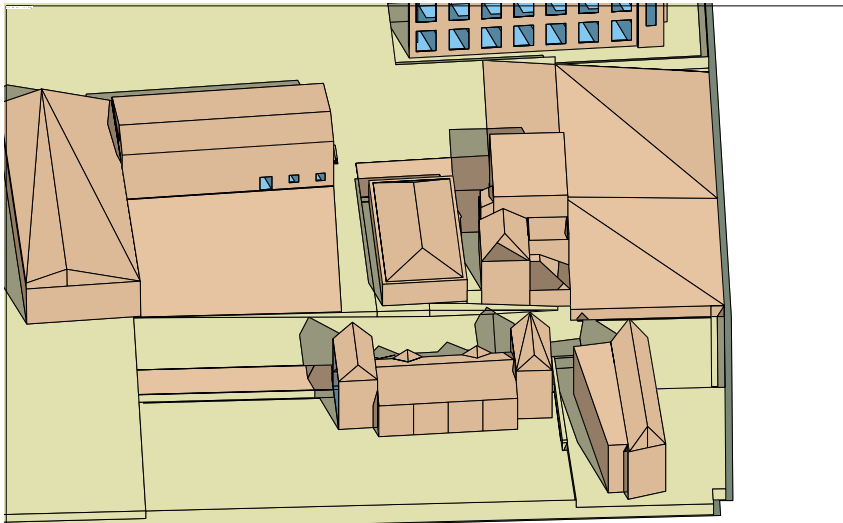
View time = 21 Mar 10:00  
Site Latitude = 51.59  
Longitude diff. = -0.07  
Model Bearing = 0.00  
Sun: azi = 141.58 alt = 31.41  
Eye: azi = 180.00 alt = 40.00



**Proposed**

Suncast image:

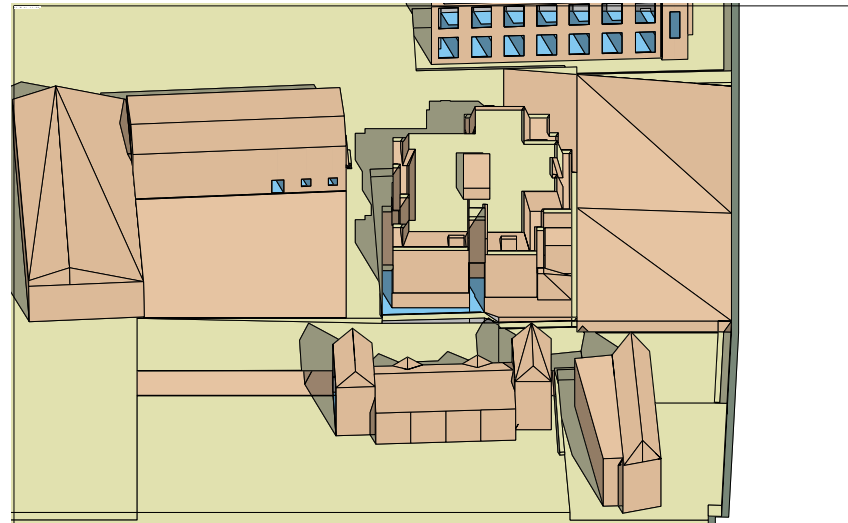
View time = 21 Mar 11:00  
Site Latitude = 51.59  
Longitude diff. = -0.07  
Model Bearing = 357.70  
Sun: azi = 158.76 alt = 36.05  
Eye: azi = 180.00 alt = 40.00



**Existing**

Suncast image:

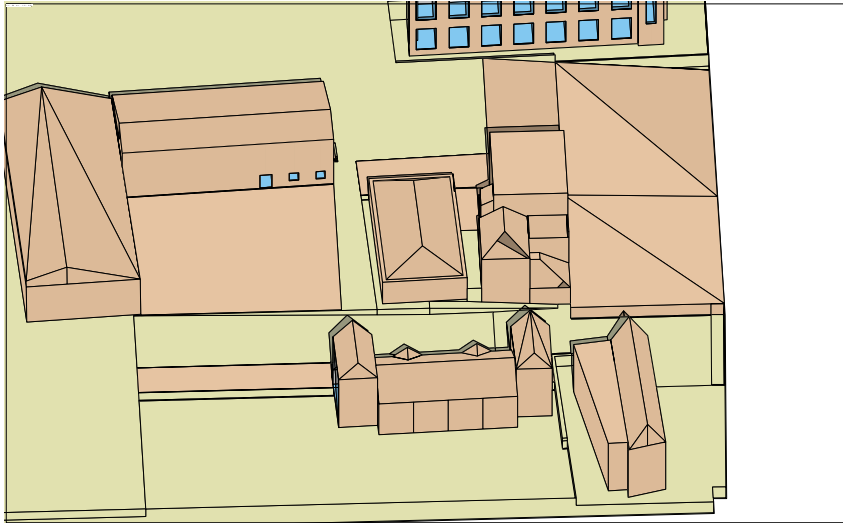
View time = 21 Mar 11:00  
Site Latitude = 51.59  
Longitude diff. = -0.07  
Model Bearing = 0.00  
Sun: azi = 158.76 alt = 36.05  
Eye: azi = 180.00 alt = 40.00



**Proposed**

Suncast image:

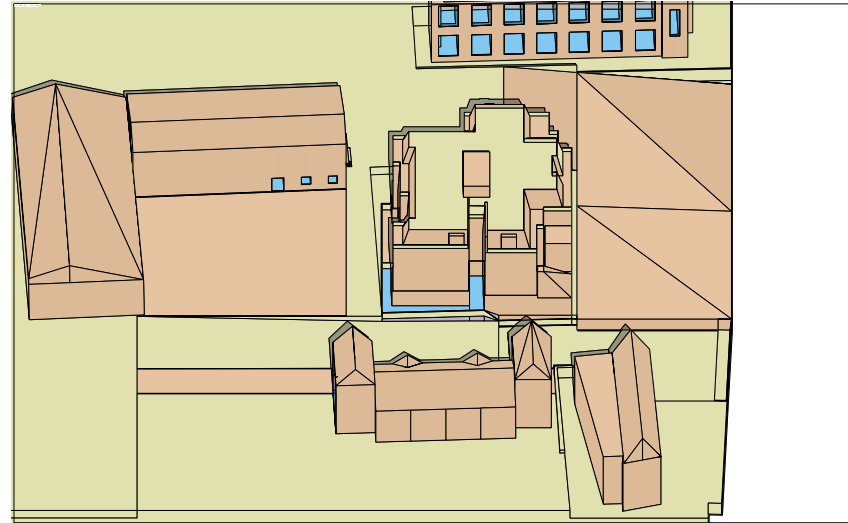
View time = 21 Mar 12:00  
Site Latitude = 51.59  
Longitude diff. = -0.07  
Model Bearing = 357.70  
Sun: azi = 177.42 alt = 37.97  
Eye: azi = 180.00 alt = 40.00



**Existing**

Suncast image:

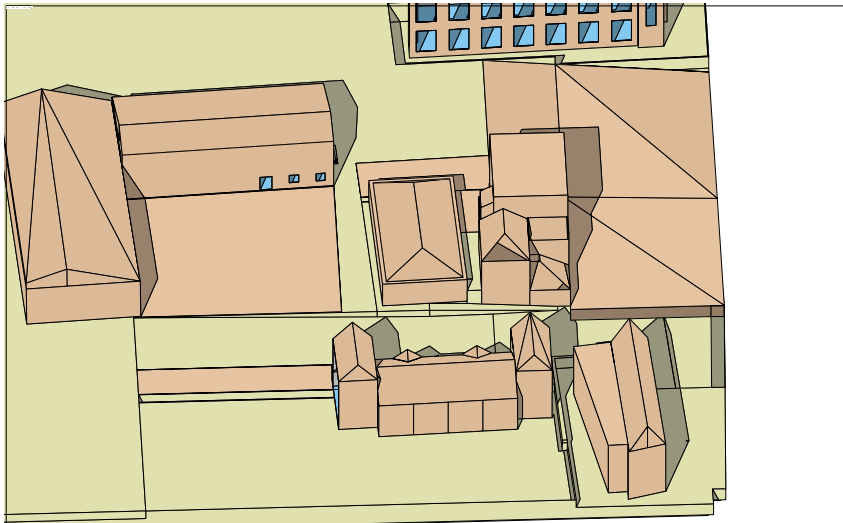
View time = 21 Mar 12:00  
Site Latitude = 51.59  
Longitude diff. = -0.07  
Model Bearing = 0.00  
Sun: azi = 177.42 alt = 37.97  
Eye: azi = 180.00 alt = 40.00



**Proposed**

Suncast image:

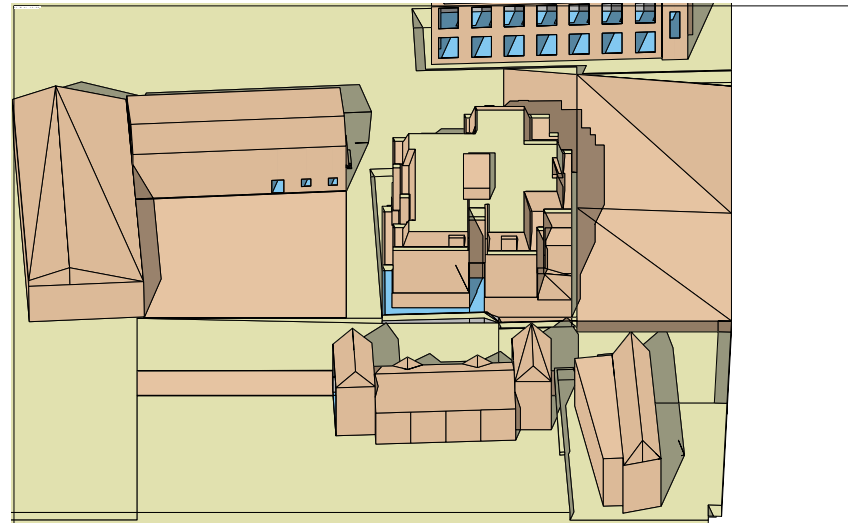
View time = 21 Mar 13:00  
Site Latitude = 51.59  
Longitude diff. = -0.07  
Model Bearing = 357.70  
Sun: azi = 196.29 alt = 36.86  
Eye: azi = 180.00 alt = 40.00



**Existing**

Suncast image:

View time = 21 Mar 13:00  
Site Latitude = 51.59  
Longitude diff. = -0.07  
Model Bearing = 0.00  
Sun: azi = 196.29 alt = 36.86  
Eye: azi = 180.00 alt = 40.00

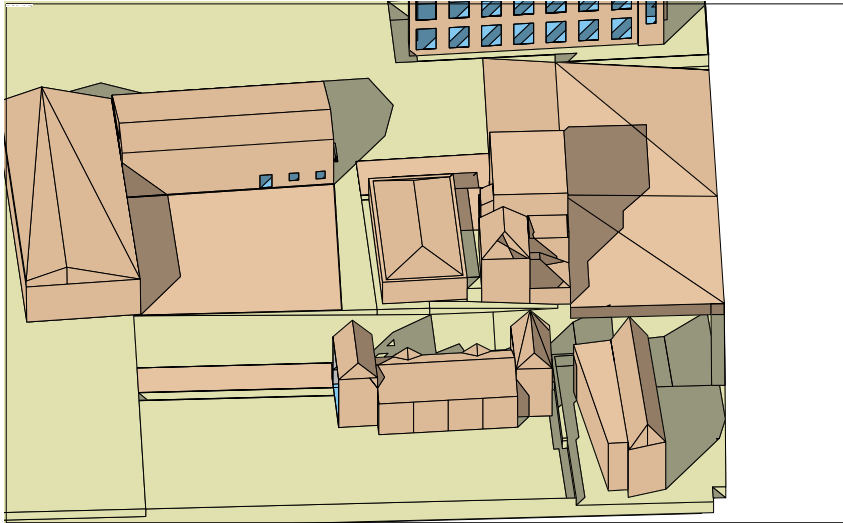


**Proposed**



Suncast image:

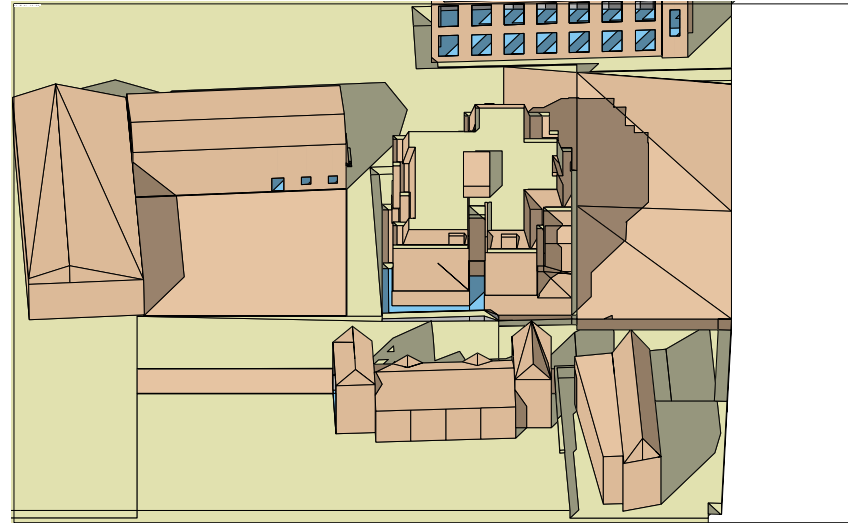
View time = 21 Mar 14:00  
Site Latitude = 51.59  
Longitude diff. = -0.07  
Model Bearing = 357.70  
Sun: azi = 213.95 alt = 32.90  
Eye: azi = 180.00 alt = 40.00



**Existing**

Suncast image:

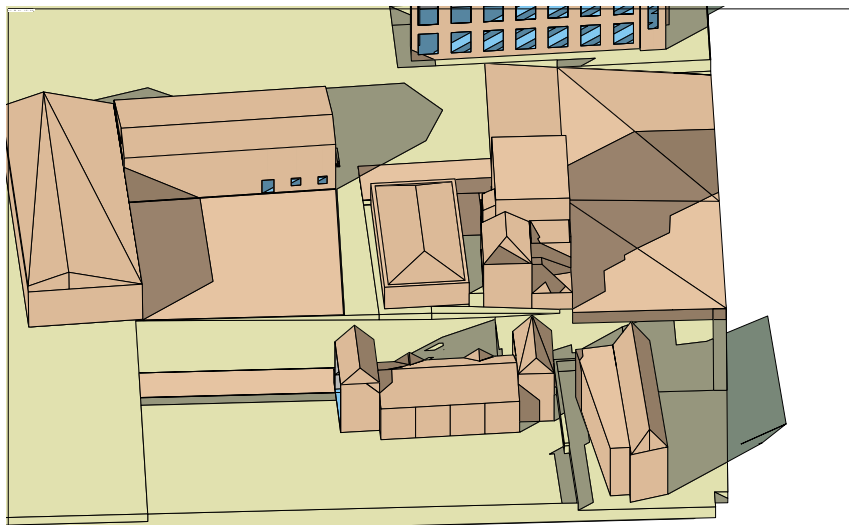
View time = 21 Mar 14:00  
Site Latitude = 51.59  
Longitude diff. = -0.07  
Model Bearing = 0.00  
Sun: azi = 213.95 alt = 32.90  
Eye: azi = 180.00 alt = 40.00



**Proposed**

Suncast image:

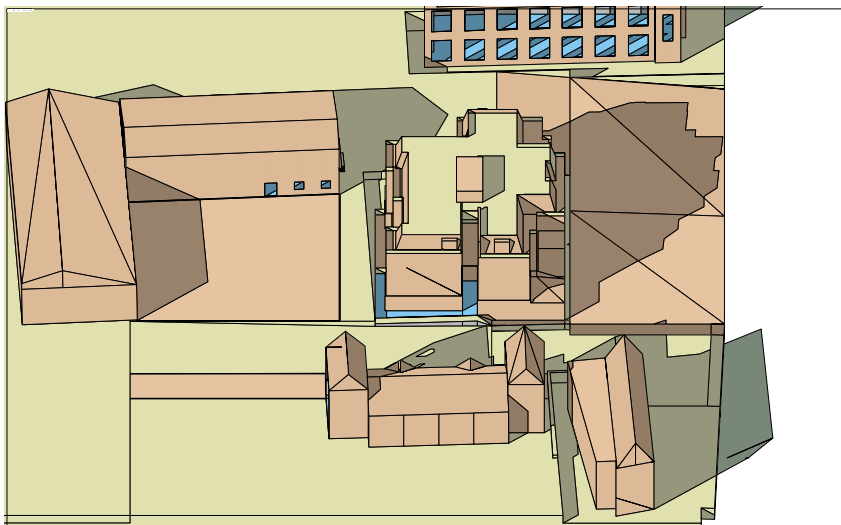
View time = 21 Mar 15:00  
Site Latitude = 51.59  
Longitude diff. = -0.07  
Model Bearing = 357.70  
Sun: azi = 229.71 alt = 26.68  
Eye: azi = 180.00 alt = 40.00



**Existing**

Suncast image:

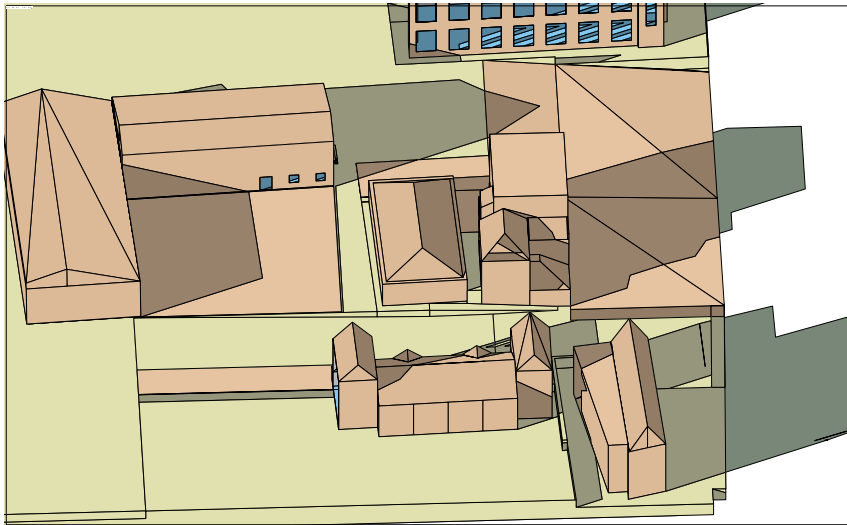
View time = 21 Mar 15:00  
Site Latitude = 51.59  
Longitude diff. = -0.07  
Model Bearing = 0.00  
Sun: azi = 229.71 alt = 26.68  
Eye: azi = 180.00 alt = 40.00



**Proposed**

Suncast image:

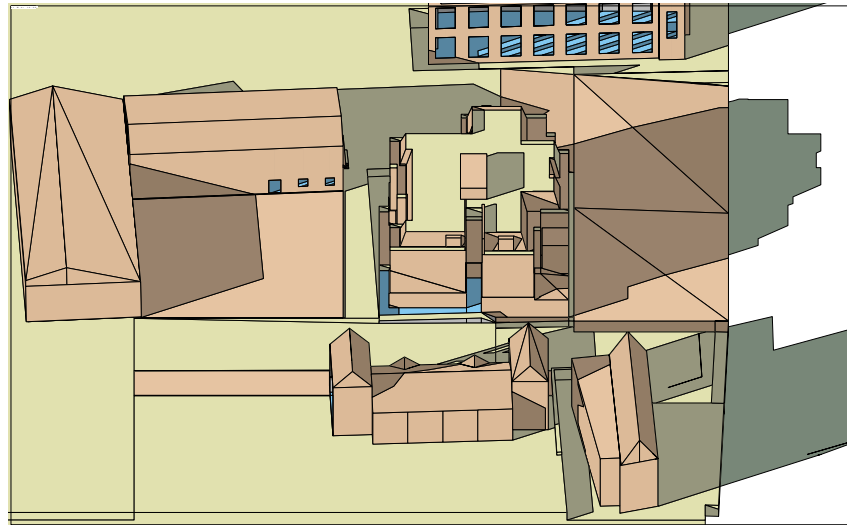
View time = 21 Mar 16:00  
Site Latitude = 51.59  
Longitude diff. = -0.07  
Model Bearing = 357.70  
Sun: azi = 243.64 alt = 18.90  
Eye: azi = 180.00 alt = 40.00



**Existing**

Suncast image:

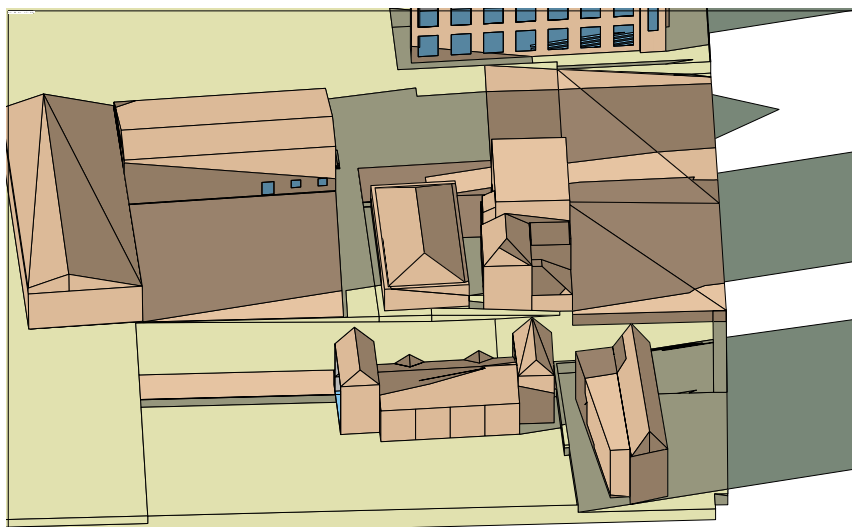
View time = 21 Mar 16:00  
Site Latitude = 51.59  
Longitude diff. = -0.07  
Model Bearing = 0.00  
Sun: azi = 243.64 alt = 18.90  
Eye: azi = 180.00 alt = 40.00



**Proposed**

Suncast image:

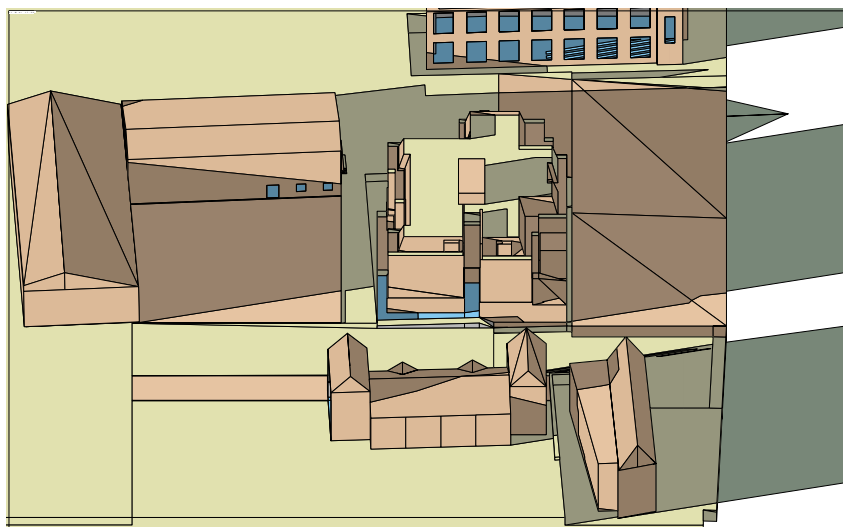
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**Existing**

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**Proposed**





## **DESIGN AND ACCESS STATEMENT**

**339 – 401 High Road  
Tottenham London N17 6QN**

**TOTTANHAM WAR SERVICES INSTITUTE**

**7<sup>TH</sup> January 2015**

## INTRODUCTION

This statement has been prepared to support an application, by Tottenham War Services Institute in occupation of the premises, to extend above and develop to the rear of existing buildings to provide 17 residential flats.

Tottenham War Services Institute is a Tottenham based charity with a remit to provide support and chances for the people of Tottenham. A new board of Trustees has recently been elected. The charity are able to provide practical, emotional and sometimes financial support (in terms of housing and food) to those in the Borough who are severely disadvantaged. They also provide facilities and a home for other small charities, who are struggling from funding cuts, and for people who are community minded in terms of business, culture and arts, often without charge. The aim of the Charity is to invite residents of Tottenham, regardless of their station, to come along and be welcome in a place where they get help and support.

This of course comes at a price in this era of dwindling funding. To potentially resolve this situation and to be able to carry on providing the support, the Charity has agreed an arrangement with developer Alto Property Investments Ltd. They will provide finance and expertise to develop the site, including refurbishing the existing premises for the Charity's use and provide a level of funding for the Charity, which will include them having some of the flat for their use and income. In return the developer will retain the remainder of the flats.

## THE SITE

The site is 399 to 401 on the west side of Tottenham High Road, which is opposite the Police Station and just north of the junction at Monument Way. It was formally the east London headquarters of Royal British Legion during which time the rear part of the site was sold and developed as Nicholson Court. The building was re-developed in about 1988 to retain the older building at 399 and to rebuild the part of the building at 401, retaining its original appearance. The new part abuts the older part and is connected at all levels.

The proposal includes the demolition of the rear hall which is presently used by the Charity in connection with the centre. To compensate for the loss of space the first and second floors, previously occupied by others, have been regained by the charity for the community use.

## CONTEXT

The building at 399-401 High Road comprised of a pair of late eighteenth century three storey houses, rebuilt following a fire in the 1980's. The remaining nineteenth century addition on the south side was not affected by the fire and remains. The building was listed in 1974 and has not been revised, so the list description describes the building before the fire and the subsequent rebuilding. The site has been compromised with later building erected within the curtilage of the original site, both to the west and to the south of the building and the original setting of the listed building ceases to exist. At present there are no build additions on the north side of the building, although the map of 1896-1915 shows a wing on this side, as does the map in 1955 (see Heritage Statement page 11) the building was constructed as a pair of houses. The building was constructed as a pair of houses with the 1810 records showing extensions to the north and south. The map of 1896-1915 clearly shows the extension on the north side but, as no photographic records can be found, it is reasonable to assume that, as a pair of houses, it would match the remaining south side extension. It should be noted that the Design Review Panel meeting on 24<sup>th</sup> July 2014 noted the buildings significance has been lost substantially during the previous works and demolition should be considered.

The proposal is to retain the rebuilt buildings with the window proportions, windows, arches and cornices restored and the brickwork repointed. The wing on the north side is to be rebuilt to match what remains on the south side, with the single storey part on this side extended upwards, including the rear section behind. Although the historic environment of the site has been lost, this application pays special attention to preserving and enhancing the character and appearance of the area. A roof extension at third floor level is proposed to the existing parapet, set well back and further inclined in sheet metal cladding to reduce the visibility, whilst providing an important canopy feature to the building. The roof extension to provide a third floor will not be provided over the rebuilt north wing in order to ensure this element of the building will be subordinate to the host building as it was originally. The twentieth century single storey extension at the rear is to be demolished and replaced with a four storey extension with basement designed with scale, materials and features in keeping with the rebuilt parts, and the modern top floor is set behind and inclined away, from a parapet to reduce its visibility. The proposal will retain the existing ground, first and second floors of the main building, occupied by the Charity, in their present use and provide a replacement hall for their use, at basement level below the new rear extension. The existing basement of the main building is proposed as a conversion to provide two flats.

## HERITAGE AND CONSERVATION

The buildings significance has been lost substantially during the rebuilding works, the heritage value has gone and the setting of the buildings has been compromised by building within and adjacent to its curtilage.

The purpose of this proposal, other than adding to the housing stock, is to restore the features of the original building constructed as a pair of houses with wings at both sides. To achieve this window proportions, windows, arches, cornices and other details to match the original and the brickwork is repointed with a recessed joint. This is not a pastiche approach but one which considers what was once the setting of a listed building and seeks to preserve and enhance the Conservation Area by restoring the features of the former building.

## AMENITY SPACE

The proposal situated on the west side of High Road on a wide plot with open land within the northern boundary line. A short walking distance away is Down Lane Park, which can be accessed via Hamilton Close opposite, onto Temar Way and into the park on Park View Road. Communal amenity space within the site is provided as 72 sqm on the roof on the west side, accessed via an external door from the main staircase.

The following flats have private amenity space as follows:-

FLAT	Amenity Space (sqm)
1	11.2
2	21.4
3	37.2
4	15.3
5	7.0
6	5.4
7	5.7
8	2.5
9	3.5
10	10.0
11	5.7
12	2.5
13	3.9
14	6.6
15	3.3
16	16.2
17	14.6
	<b>172.0</b>

### Total amenity space:

Private to flats	172.0
Communal roof garden	72.0
<b>TOTAL</b>	<b>244.0</b>



## **CYCLE PROVISION**

Secure cycle storage is provided for 28 cycles with Sheffield stands on the north east corner at basement level.

## **REFUSE**

Storage for domestic waste recycling and organic waste are provided at ground floor level as follows:-

60 lit per bedroom of domestic waste  
 60 lit per bedroom of recycling waste  
 23 lit per bedroom of organic waste

The total requirement is (37 bedrooms):-

Domestic	2220 lit
Recycling	2220 lit
Organic	851 lit.

The existing premises occupied by Chances retains its existing refuse facilities.  
 Access for refuse vehicles remains as existing

## **ENERGY**

Improving energy efficiency and reducing reliance on carbon generating fossil fuels has been given consideration in the design of the proposals. Energy standards have been improved upon compared to a conventional Part L domestic building, achieved by increasing the insulation levels of the existing building and by providing a high level of insulation to the new building envelope. In addition a preparation of the sites energy demand would be delivered through a renewable source.

## **WATER**

The development will be designed to be as water efficient as possible during its operation. Whilst water use largely depends on occupant behaviour the proposals will limit water use by design best practice targets for water use could be achieved for the development, which may reduce water usage to 105 litres/bedspace/day. The dwellings will be fitted with a range of water saving devices within the bathrooms and kitchens.

## **CONCLUSION**

The design has been carefully developed through research to provide a sustainable development of much needed flats, to enable Chances to continue their valuable work for the benefit of the disadvantaged part of the community.  
 The design has taken into account the relevant planning history to make efficient use of this valuable urban land. The proposals complies with the policies of the LDF, UDP saved policies and supplementary development guidance and provides valuable additional housing in an area with good accessibility to a range of public transport, local services and amenities.

Ada <b>architects</b>		DRAWING / DOCUMENT ISSUE SHEET															
399 High Road Tottenham	DWG NO	SCALE	27/11/14	08/12/14	08/12/14	11/12/14	11/12/14	17/12/14	07/01/15	07/01/15	08/01/15	12/01/15					
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CLIENT NAME:																	
DRAWING/DOCUMENT TITLE																	
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399 Tottenham Existing Site Plan	311-01	1/200		A		A						A					
399 Tottenham Existing Basement Floor Plan	311-02	1/100		/		/						/					
399 Tottenham Existing Ground Floor Plan	311-03	1/100		/		/						/					
399 Tottenham Existing First Floor Plan	311-04	1/100		/		/						/					
399 Tottenham Existing Second Floor Plan	311-05	1/100		/		/						/					
399 Tottenham Existing Roof Plan	311-06	1/100		/		/						/					
399 Tottenham Existing High Road Elevation	311-08	1/100		/		/						/					
399 Tottenham Existing North Elevation	311-09	1/100		/		/						/					
399 Tottenham Existing Sections A-A & B-B	311-10	1/200		/		/						/					
399 Tottenham Proposed Site Plan	311-11	1/100	M	N	N	N					O	O					
399 Tottenham Proposed Basement Floor Plan	311-12	1/100	R	R							R	R					
399 Tottenham Proposed Ground Floor Plan	311-13	1/100	T	T							T	T					
399 Tottenham Proposed First Floor Plan	311-14	1/100	T	T							T	T					
399 Tottenham Proposed Second Floor Plan	311-15	1/100	T	T							T	T					
399 Tottenham Proposed Third Floor Plan	311-16	1/100	T	U	U	U			V	V	V	V					
399 Tottenham Proposed Fourth Floor Plan (Superseded)	311-17	1/100															
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399 Tottenham Proposed North Elevation	311-19	1/100	P	Q	Q	Q			R	R	R	R					
399 Tottenham Proposed West Elevation	311 -20	1/100	I	I				J	K	K	K	K					
399 Tottenham Proposed South Elevation	311-21	1/100	H	H							H	H					
DISTRIBUTION																	
David Matzdorf																	
Haringey Council - Richard Truscott																	
Haringey Council - Robbie McNaugher																	
Haringey Council - John McRory												P					
Avi Dodi																	
Elizabeth Moore											P						
Angelique Glat																	
Jane Yang				d				d	d								
Damian Selim	P				P					P							
Saman Dallali																	
Florian Cassandro			d														
Chris Hall						P											
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Ada <b>architects</b>		DRAWING / DOCUMENT ISSUE SHEET															
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Design & Access Statement	/	/											/				
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Acoustic Report	/	/											/				
Daylight, Sunlight & Overshadowing Report	/	/											/				
Energy Assessment	/	/											/				
Lifetime Homes Statement	/	/											/				
Planning Statement	/	/											/				
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Unit Area Analysis	/	/											/				
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Avi Dodi																	
Elizabeth Moore											P	P					
Angelique Glati												P					
Jane Yang				d				d	d								
Damian Selim			P			P				P							
Saman Dallali																	
Florian Cassandro				d													
Chris Hall						P											
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# Energy Demand Assessment for:

Flats 1-17, 399 High Road,  
London, N17 6QN

First Draft



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<b>D. Calculating the Renewable Energy Requirement</b>	<b>4</b>
<b>E. Potential Renewable Energy Technologies</b>	<b>4</b>
<ul style="list-style-type: none"><li>• Renewable Energy Technologies Not Considered</li><li>• Renewable Energy Technologies Considered</li></ul>	
<b>F. Selection of Preferred Renewable Energy Technology</b>	<b>4</b>
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## A. Objective

This report relates to the planned development at 399 High Road, London, N17 6QN, which will be comprised of a mixture of 17 one, two, three and four bed flats. However, flats 1 & 2 will not be part of this energy assessment as they are conversions and not new builds.

The planning condition for the development at 399 High Road, London requires that an energy demand assessment be produced. This report will:

- detail the energy efficiency measures inherent in the design of the flats; and
- demonstrate how the selected renewable technologies and energy efficient measures will reduce the CO2 emissions of the dwelling by 40%.

## B. Methodology

- i. Prior to considering renewable energy options, it needs to be demonstrated how the development can meet the minimum standards required for a pass under the 2013 building regulations without the use of renewable technologies.
- ii. The total CO2 emissions for this dwelling is then used as the basis for calculating the 40% reduction.
- iii. The final step is to demonstrate how the selected renewable technologies for the site will combine to meet the 40% reduction in CO2.

## C. Energy Efficiency Design Measures

The energy efficiency design measures undertaken with regards to the building fabric, lighting, heating and ventilation systems are summarised in the table below.

Design Elements	Comparison of Dwelling Construction with Minimum Regulatory Standards	
	399 High Road, London	Minimum Standards Required by Part L1A Building Regulations
Wall U-Value	0.24	0.3
Floor U-Value	0.18	0.25
Roof U-Value	0.15	0.2
Windows/doors U-Values	1.5/1.8	2
Lighting – Low energy lighting installed (% of light fittings)	100%	75%
Boiler Efficiency	89%	88%
Heating Controls	Time & Temperature Zone Controls	Programmer, room thermostat & TRVs
Architectural Measures	Property to be constructed using accredited construction details	Not compulsory requirement
	Pressure Test Level 4	Average Level 10

#### **D. Calculating the Renewable Energy Requirement**

The total CO<sub>2</sub> emissions target for the 15 flats is 295.31 kgCO<sub>2</sub>/m<sup>2</sup>/year. Using the design specifications outlined above, the total design CO<sub>2</sub> emissions is 173.68 kgCO<sub>2</sub>/m<sup>2</sup>/year. This demonstrates an overall reduction of 40.85%.

#### **E. Potential Renewable Energy Technologies**

##### Renewable Energy Technologies Not Considered

The following renewable energy technologies will not be suitable for this particular project:

- **Small-scale wind turbine** – There is a lack of space to cater for the amount of turbines needed to produce the amount of energy which is required for this project.
- **Biomass CHP** – For this project, the proposed site would not have the appropriate space available for a Biomass system.
- **Solar thermal collector** – This type of renewable energy source would not be able to produce enough energy to meet the 40% target.

##### Renewable Energy Technologies Considered

The following renewable technologies are considered potentially viable for the development and will be considered further:

- **Photovoltaic (PV)** – The location of the site is very appropriate for the implementation of photovoltaic panels producing electricity for the 15 flats. The block is 4 stories high and is not over shaded by trees or other buildings on the south elevation.
- **Ground source heat pumps (GSHP)** – This sort of renewable energy system would generate enough energy to reach the 40% target and the site may be large enough to accommodate the technology. However, this is by far the most expensive option.

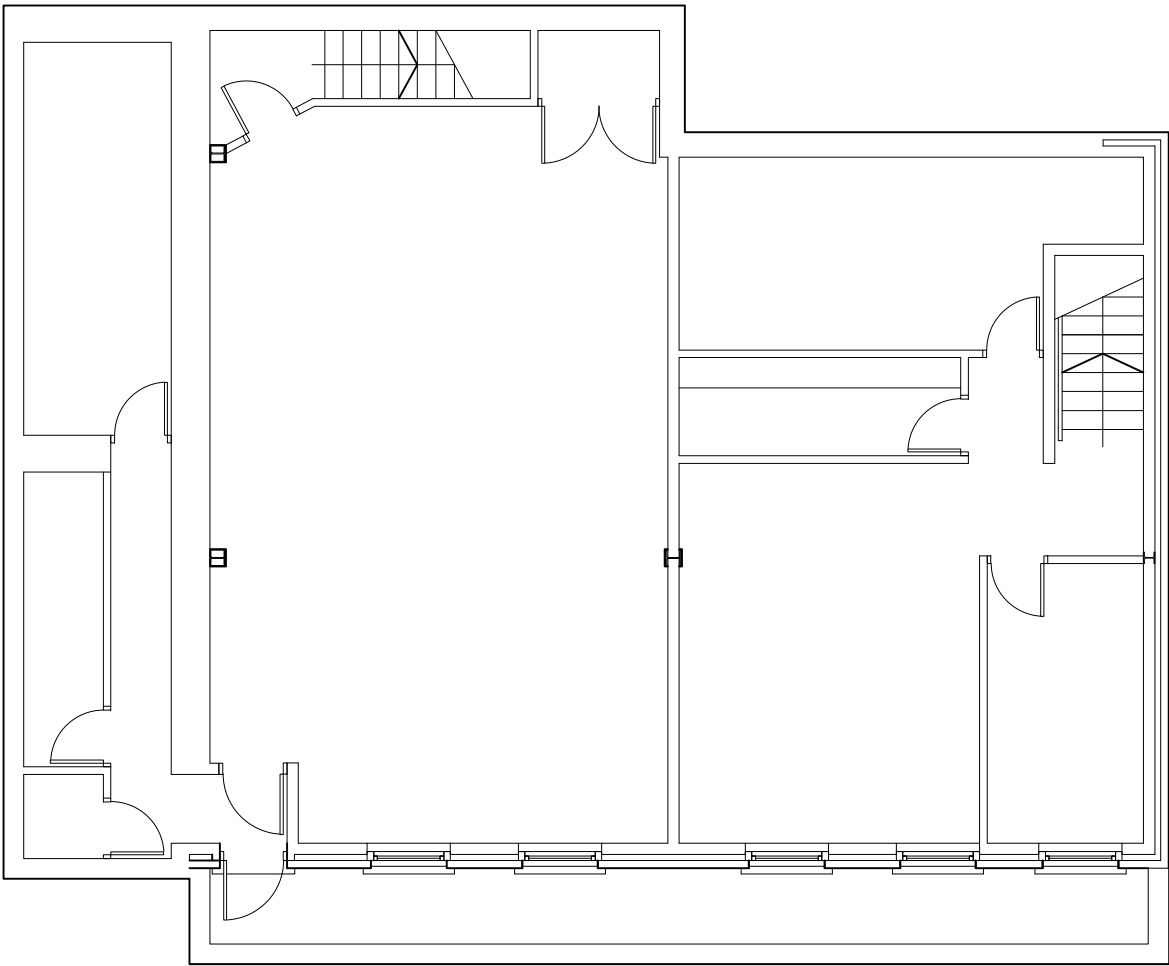
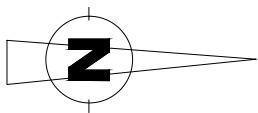
#### **F. Selection of Preferred Renewable Energy Technology**

Considering the two viable options above, the preferred choice is to use photovoltaics instead of ground source heat pumps. This renewable technology along with the energy efficient design measures means that the target can be achieved.

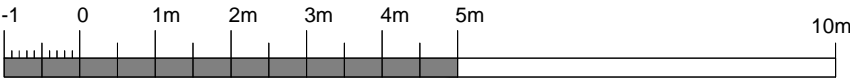
#### **G. Details of Selected Renewable Energy Technology**

In order to reach the 40% target, each flat will need to have a 1.25kW PV system. This will consist of 5 PV panels situated on the roof and facing south at an angle of 30° to the horizontal. Therefore, for all 15 flats, 75 panels will be needed in total.

All relevant information and calculations which have been used to reach the conclusions in this document can be seen in the Excel Spreadsheet attached.



Basement Floor Plan



-	-	-
REV	DATE	COMMENTS

P L A N N I N G

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PROJECT: 399 Tottenham High Road  
London  
N17 6QN

SUBJECT: EXISTING  
BASEMENT FLOOR PLAN

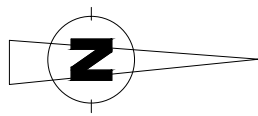
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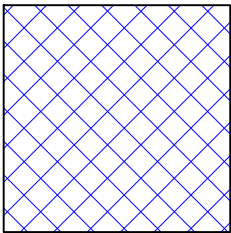
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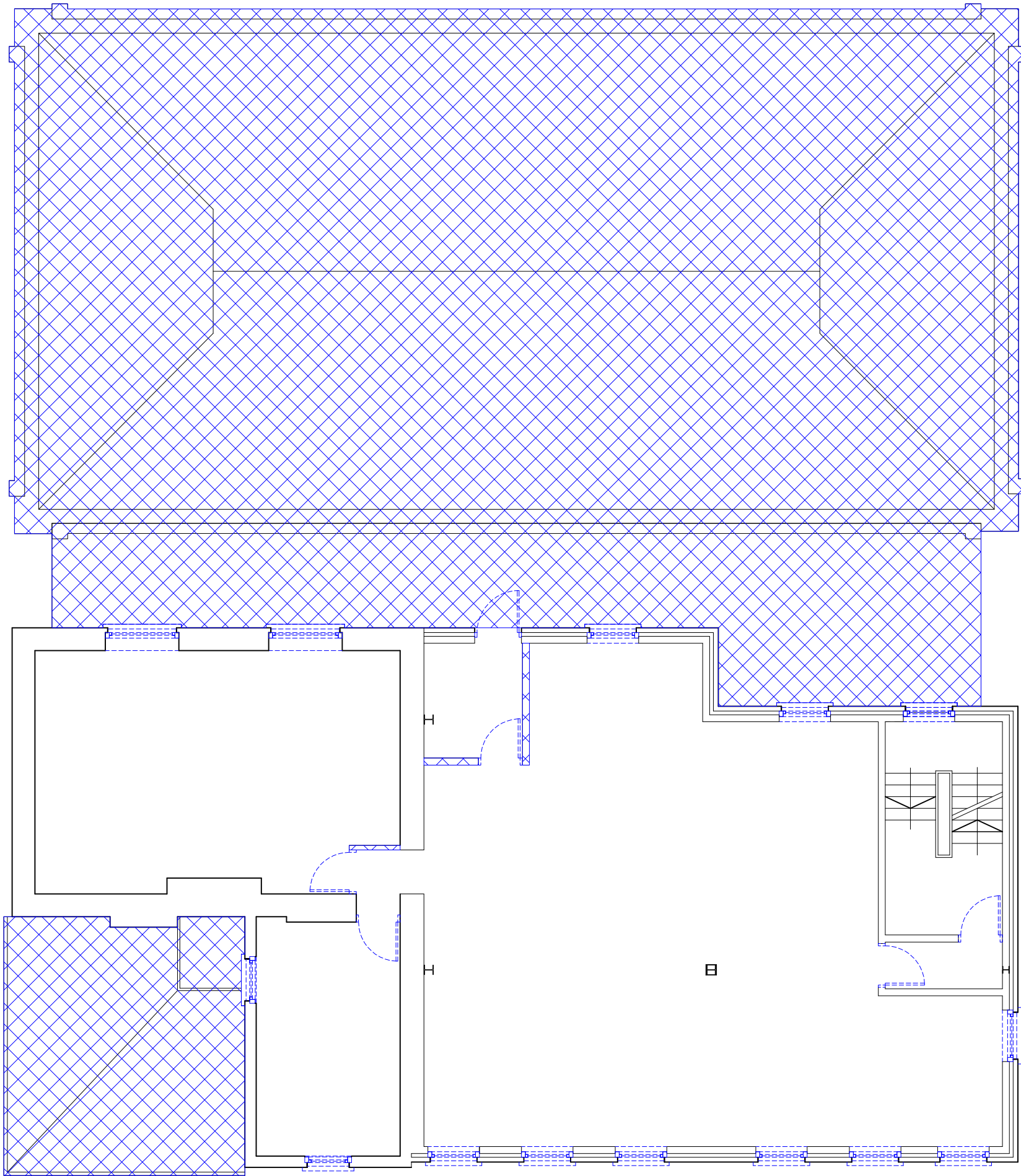




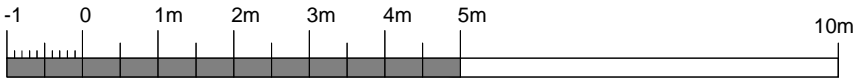
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Hatching denotes  
areas of existing  
structure  
to be demolished



First Floor Plan  
Demolition



A	08-01-15	Demolition shown on updated scheme
REV	DATE	COMMENTS

P L A N N I N G

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PROJECT: 399 Tottenham High Road  
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N17 6QN

SUBJECT: EXISTING FIRST FLOOR  
DEMOLITION PLAN

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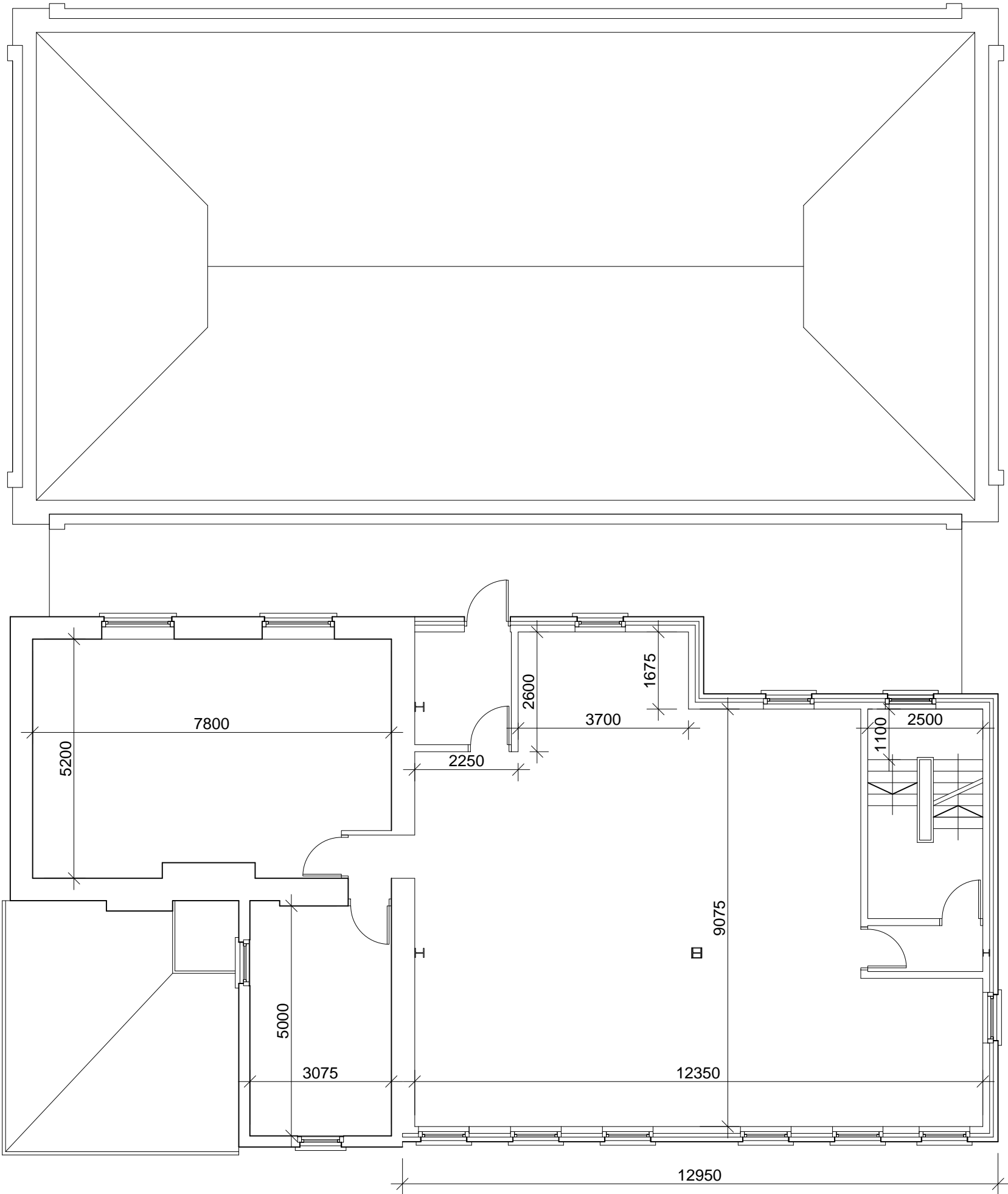
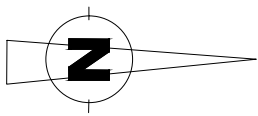
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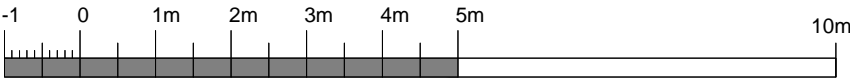
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First Floor Plan



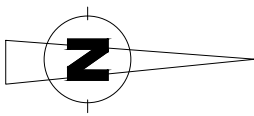
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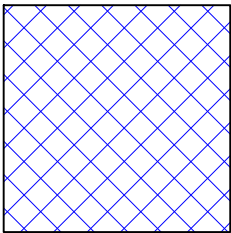


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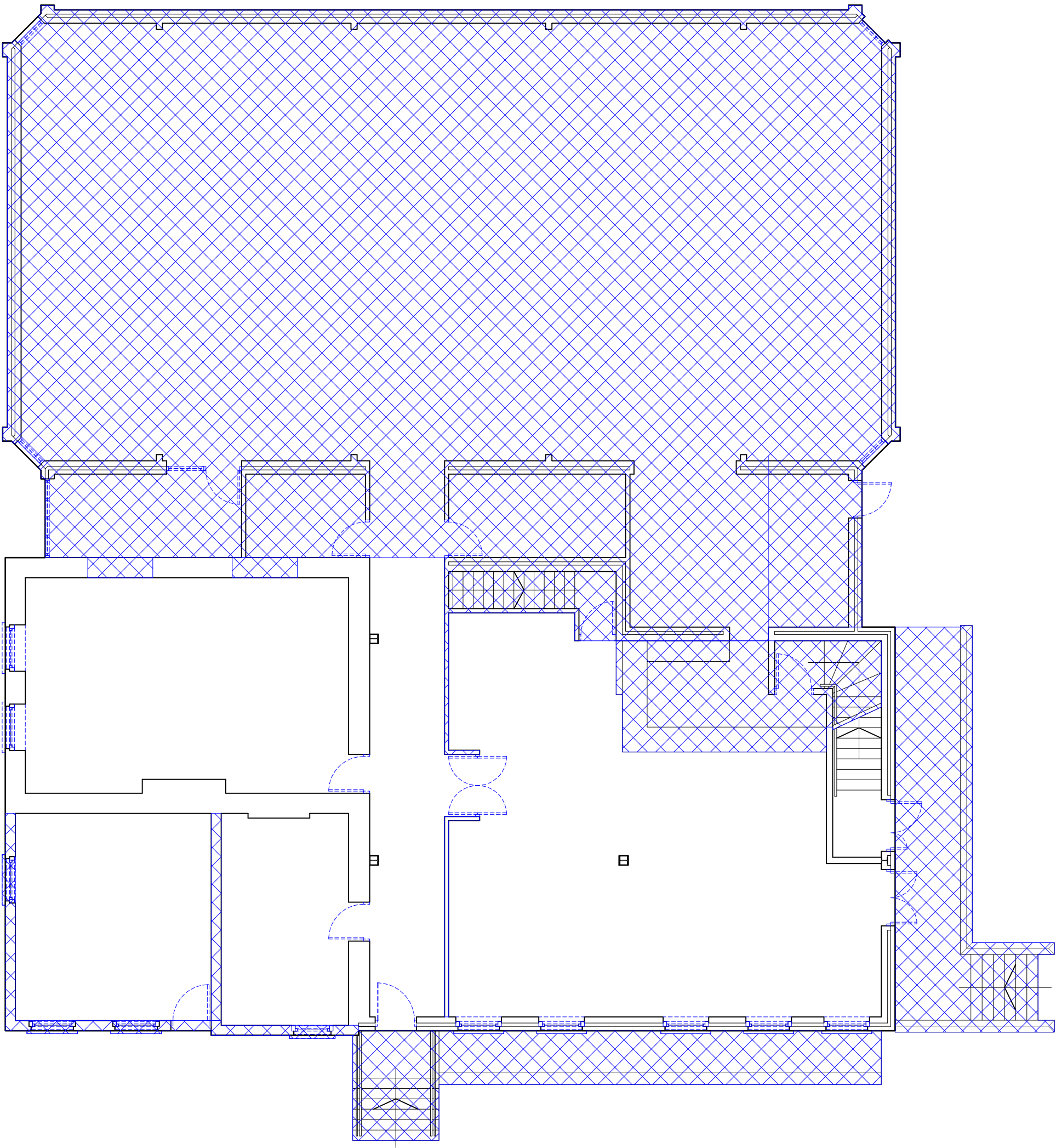
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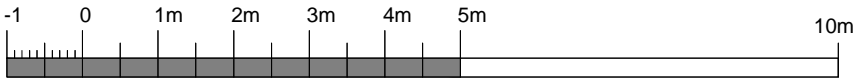
KEY



Hatching denotes  
areas of existing  
structure  
to be demolished



Ground Floor Plan  
Demolition



A	08-01-15	Demolition shown on updated scheme
REV	DATE	COMMENTS

P L A N N I N G

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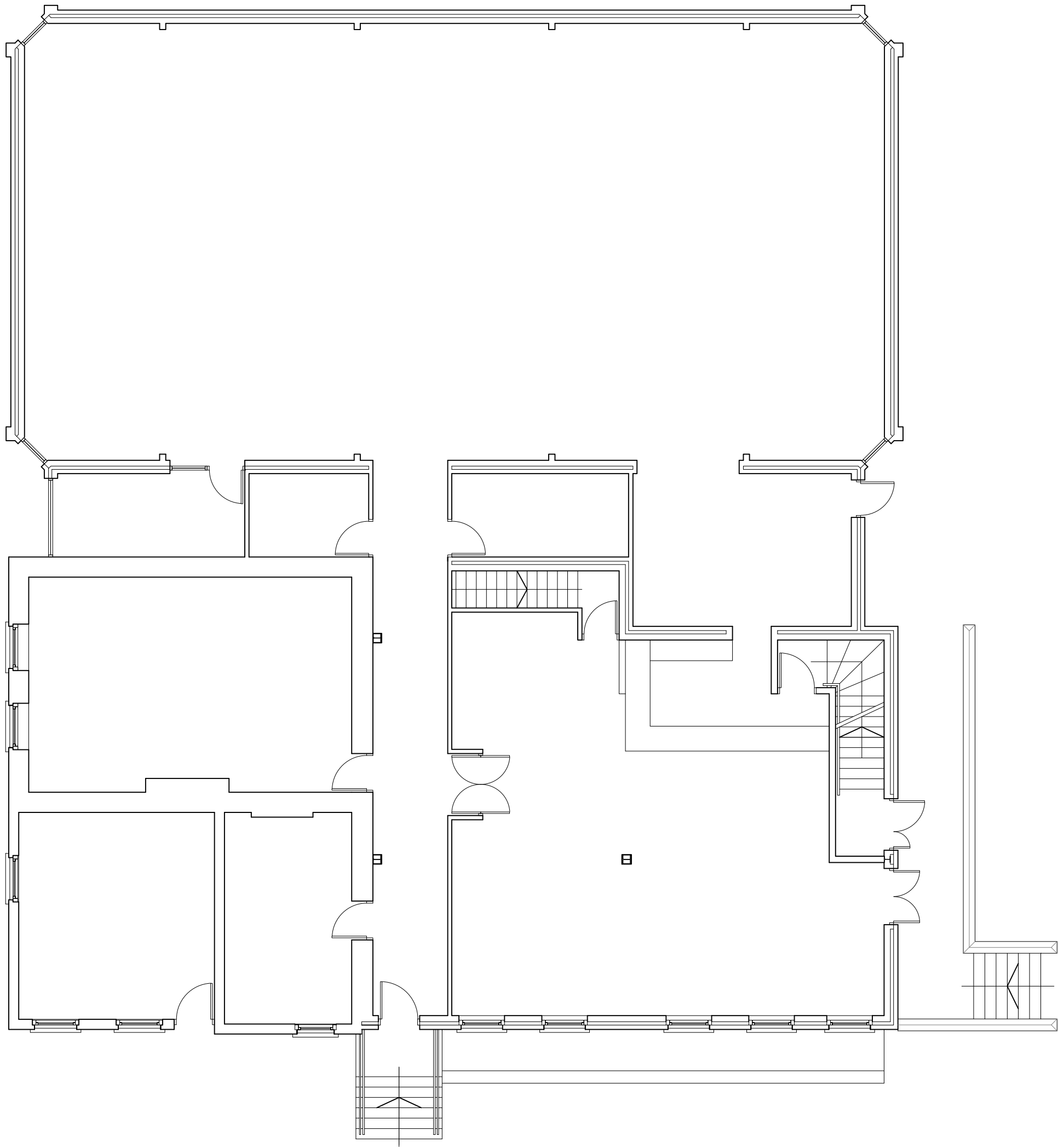
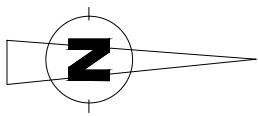
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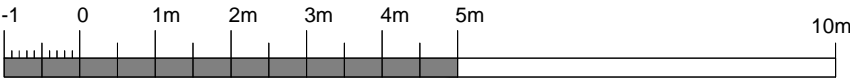
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Ground Floor Plan



REV	DATE	COMMENTS
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P L A N N I N G

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Web: www.adaarchitects.co.uk

PROJECT: 399 Tottenham High Road  
London  
N17 6QN

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GROUND FLOOR PLAN

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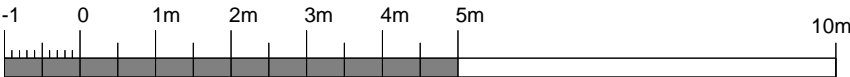
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High Road Elevation



-	-	-
REV	DATE	COMMENTS

P L A N N I N G

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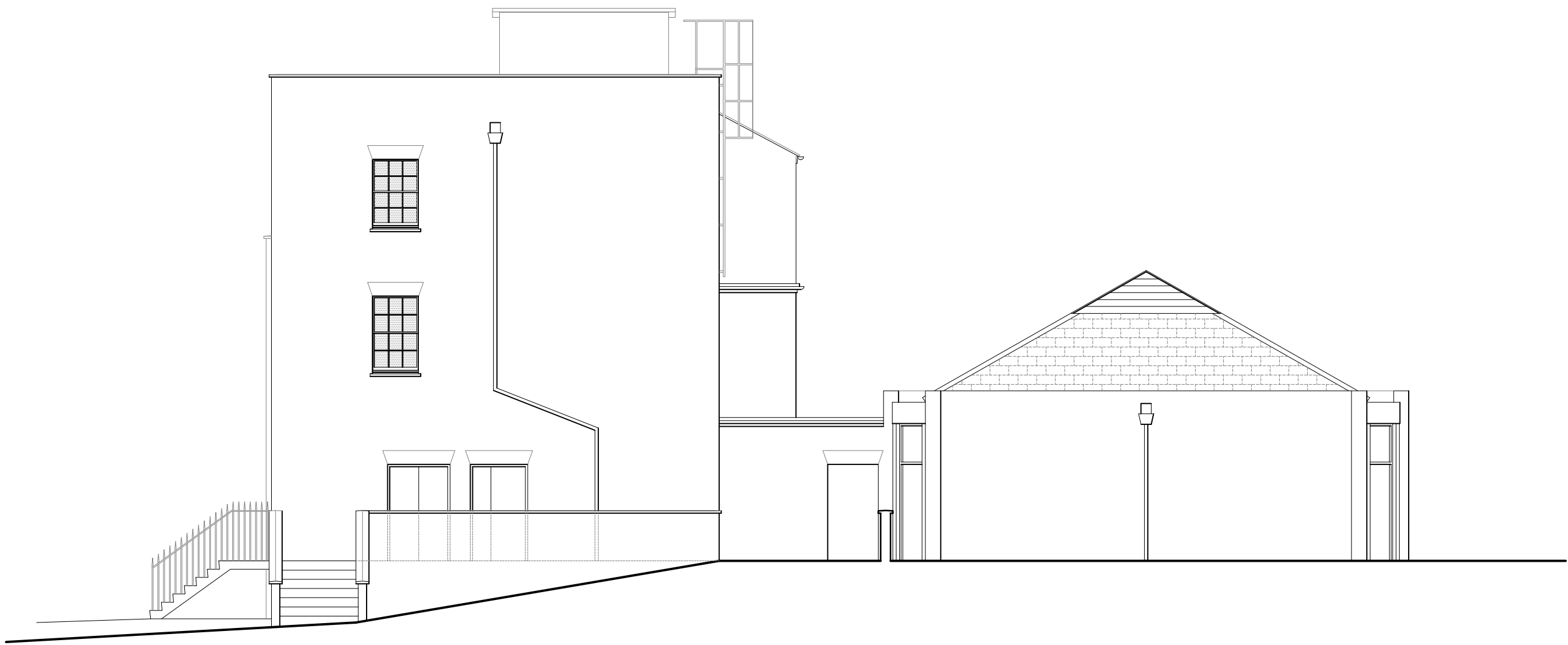
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HIGH ROAD ELEVATION

DRAWING NO: 311/08

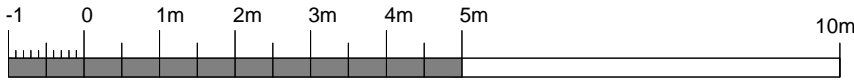
SCALE: 1.100 @ A2      DATE: JULY 2013

DRAWN BY: WLH      CHECKED BY:

REV:															
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North Elevation



REV	DATE	COMMENTS
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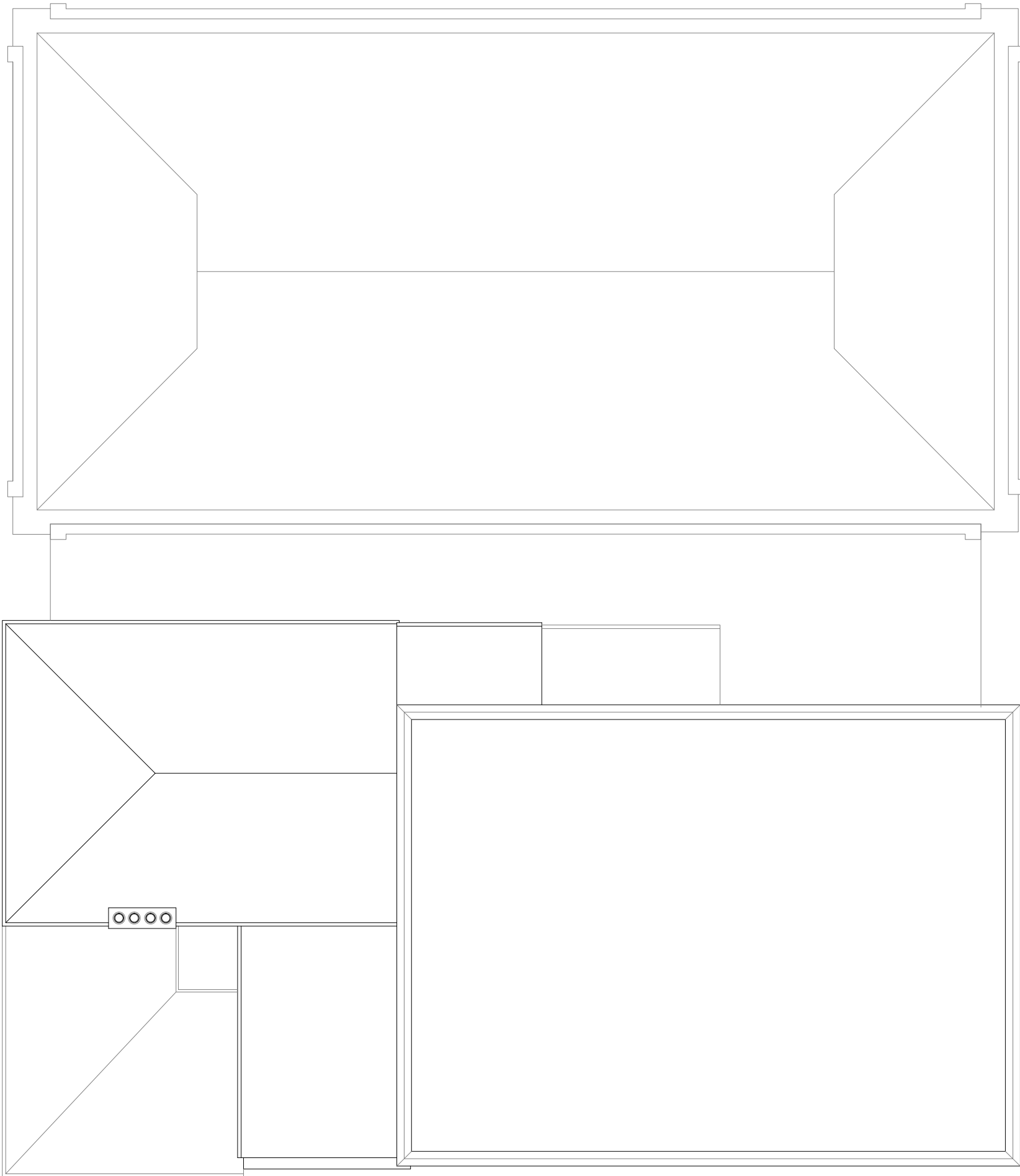
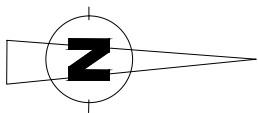
P L A N N I N G

ada

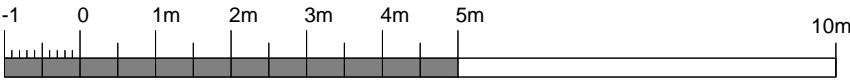
ARCHITECTS

129 Kings Road  
Halestead  
Essex CO9 1HJ  
Tel: 01787 477557  
E-mail: info@adaarchitects.org.uk  
Web: www.adaarchitects.co.uk

PROJECT: 399 Tottenham High Road London N17 6QN	
SUBJECT: EXISTING NORTH ELEVATION	
DRAWING NO: 311/09	
SCALE: 1:100 @ A2	DATE: JULY 2013
DRAWN BY: WLH	CHECKED BY:
REV:	



Roof Plan



-	-	-
REV	DATE	COMMENTS

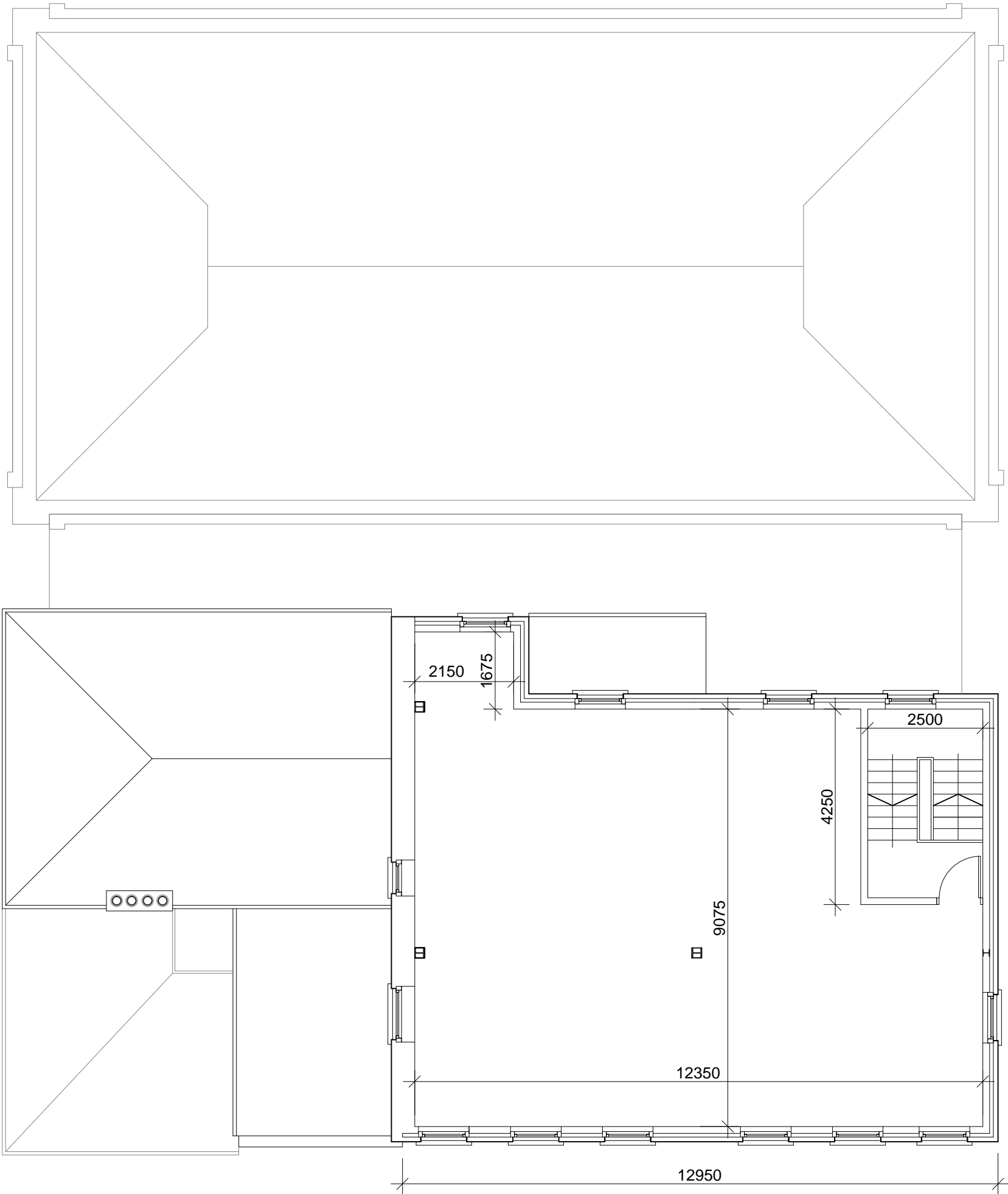
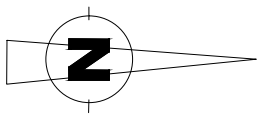
P L A N N I N G

ada

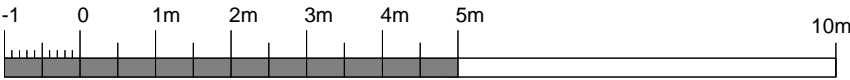
ARCHITECTS

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Halshead  
Essex CO9 1HJ  
Tel: 01787 477557  
E-mail: info@adaarchitects.org.uk  
Web: www.adaarchitectsltd.co.uk

PROJECT:		399 Tottenham High Road London N17 6QN									
SUBJECT:		EXISTING ROOF PLAN									
DRAWING NO:		311/06									
SCALE:		1:100 @ A2					DATE: JULY 2013				
DRAWN BY:		WLH					CHECKED BY:				
REV:											



Second Floor Plan



REV	DATE	COMMENTS
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P L A N N I N G

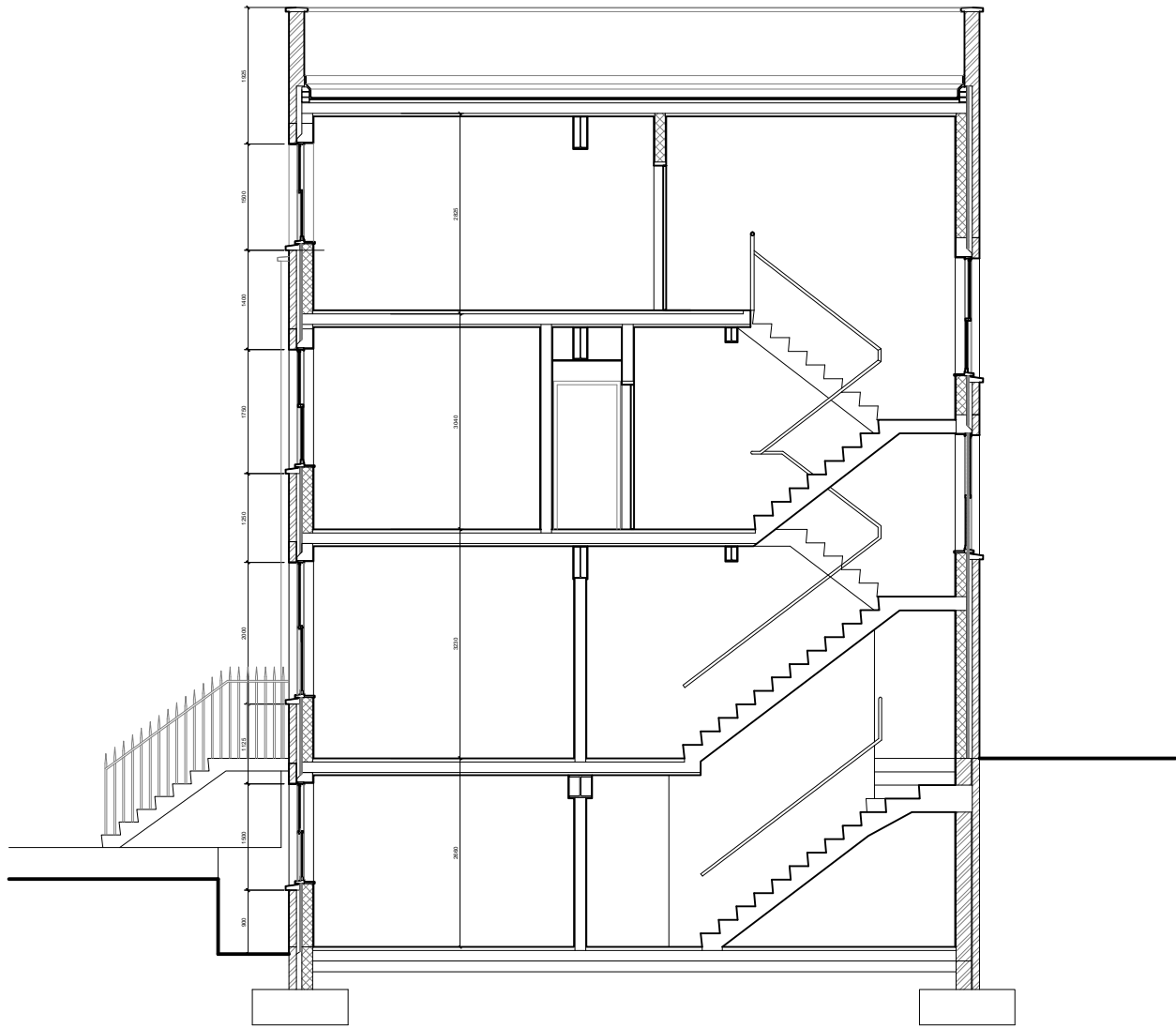
ada

ARCHITECTS

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Halestead  
Essex CO9 1HJ  
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E-mail: info@adaarchitects.org.uk  
Web: www.adaarchitects.co.uk

PROJECT: 399 Tottenham High Road London N17 6QN	
SUBJECT: EXISTING SECOND FLOOR PLAN	
DRAWING NO: 311/05	
SCALE: 1:100 @ A2	DATE: JULY 2013
DRAWN BY: WLH	CHECKED BY:
REV:	

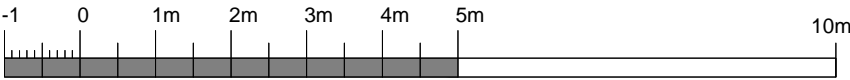




Section A-A

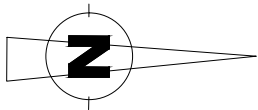


Section B-B



-	-	-
REV	DATE	COMMENTS
P L A N N I N G		
ada ARCHITECTS 129 Kings Road Halestead Essex CO9 1HJ Tel: 01787 477557 E-mail: info@adaarchitects.org.uk Web: www.adaarchitects.co.uk		
PROJECT: 399 Tottenham High Road London N17 6QN		
SUBJECT: EXISTING SECTIONS A-A & B-B		
DRAWING NO: 311/10		
SCALE: 1:100 @ A2		DATE: JULY 2013
DRAWN BY:	WLH	CHECKED BY:
REV:		

Do not scale this drawing.  
Dimensions to be taken on site and all discrepancies reported to the CA



**APPLICATION SITE**  
**AREA 0.18 HECTARES**

A	25-11-14	Existing car parking added/Site boundary line added
REV	DATE	COMMENTS

**P L A N N I N G**

**ada**ARCHITECTS

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Essex CO9 1HJ  
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E-mail: info@adaarchitects.org.uk  
Web: www.adaarchitectsltd.co.uk

PROJECT: 399 Tottenham High Road  
London  
N17 6QN

SUBJECT: EXISTING  
SITE PLAN

DRAWING NO: 311/01

SCALE: 1:200 @ A2      DATE: JULY 2013

DRAWN BY: WLH      CHECKED BY:

REV:	A																		
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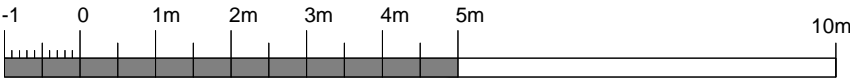
Copyright Reserved



Site Plan



South Elevation



-	-	-
REV	DATE	COMMENTS

P L A N N I N G

ada

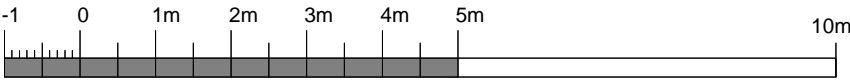
ARCHITECTS

129 Kings Road  
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Essex CO9 1HJ  
Tel: 01787 477557  
E-mail: [info@adaarchitects.org.uk](mailto:info@adaarchitects.org.uk)  
Web: [www.adaarchitectsltd.co.uk](http://www.adaarchitectsltd.co.uk)

PROJECT:		399 Tottenham High Road London N17 6QN														
SUBJECT:		EXISTING SOUTH ELEVATION														
DRAWING NO:		311/31														
SCALE:		1.100 @ A2					DATE:					MAR 2014				
DRAWN BY:		WLH					CHECKED BY:									
REV:																



West Elevation



-	-	-
REV	DATE	COMMENTS

P L A N N I N G

**ada**ARCHITECTS  
129 Kings Road  
Halestead  
Essex CO9 1HJ  
Tel: 01787 477557  
E-mail: info@adaarchitects.org.uk  
Web: www.adaarchitects.co.uk

PROJECT:		399 Tottenham High Road London N17 6QN									
SUBJECT:		EXISTING WEST ELEVATION									
DRAWING NO:		311/30									
SCALE:		1.100 @ A2					DATE: JULY 2013				
DRAWN BY:		WLH					CHECKED BY:				
REV:											



This design final submission provides evidence towards compliance with Part L of the Building Regulations, in accordance with Appendix C of AD L1A. It has been carried out by an On-Construction Domestic Energy Assessor and can be accepted for Building Control purposes without further checking. It has been prepared from plans and specifications and may not reflect the 'as built' property. This report covers only items included within the SAP and is not a complete report of regulations compliance.

Assessor name	Mr Damian Selim	Assessor number	3824
Client		Last modified	11/01/2015
Address	Flat 1 399 High Road, London, N17 6QN		

Check	Evidence	Produced by	OK?
<b>Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target</b>			
TER (kg CO <sub>2</sub> /m <sup>2</sup> .a)	Fuel = N/A Fuel factor = 1.00 TER = 16.38	Authorised SAP Assessor	
DER for dwelling as designed (kg CO <sub>2</sub> /m <sup>2</sup> .a)	DER = 22.92	Authorised SAP Assessor	
Are emissions from dwelling as designed less than or equal to the target?	DER 22.92 > TER 16.38 Excess emissions = 6.54 kg/m <sup>2</sup> (39.93%)	Authorised SAP Assessor	Failed
Is the fabric energy efficiency of the dwelling as designed less than or equal to the target?	DFEE 66.99 > TFEF 46.67 Variance = 20.32 kWh/m <sup>2</sup> (43.54%)	Authorised SAP Assessor	Failed

### Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits

<b>Fabric U-values</b>			
Are all U-values better than the design limits in Table 2?	<b>Element</b>	<b>Weighted average Highest</b>	Authorised SAP Assessor
	Wall	0.30 (max 0.30) 0.30 (max 0.70)	Passed
	Party wall	0.00 (max 0.20) N/A	
	Floor	0.18 (max 0.25) 0.18 (max 0.70)	
	Roof	0.20 (max 0.20) 0.20 (max 0.35)	
	Openings	1.93 (max 2.00) 3.00 (max 3.30)	

<b>Thermal bridging</b>			
How has the loss from thermal bridges been calculated?	Thermal bridging calculated using default $\gamma$ -value of 0.15	Authorised SAP Assessor	

<b>Heating and hot water systems</b>			
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Main heating system: Mains gas, Combi boiler Boiler Data from manufacturer Efficiency = 89.00% 2009 SEDBUK Minimum = 88.00%	Authorised SAP Assessor	Passed
	Secondary heating system: None		
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	No hot water cylinder	Authorised SAP Assessor	
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Programmer, room thermostat and TRVs  Hot water control: No hot water cylinder Boiler interlock (main system 1)	Authorised SAP Assessor	Passed

Check	Evidence	Produced by	OK?
<b>Fixed internal lighting</b>			
Does fixed internal lighting comply with paragraphs 42 to 44?	<p>Schedule of installed fixed internal lighting</p> <p>Standard lights = 0</p> <p>Low energy lights = 10</p> <p>Percentage of low energy lights = 100%</p> <p>Minimum = 75 %</p>	Authorised SAP Assessor	Passed
<b>Criterion 3: the dwelling has appropriate passive control measures to limit solar gains</b>			
Does the dwelling have a strong tendency to high summertime temperatures?	<p>Overheating risk (June) = Slight</p> <p>Overheating risk (July) = Medium</p> <p>Overheating risk (August) = Medium</p> <p>Region = Thames</p> <p>Thermal mass parameter = 250.00</p> <p>Ventilation rate in hot weather = 2.00 ach</p> <p>Blinds/curtains = None</p>	Authorised SAP Assessor	Passed
<b>Criterion 4: the performance of the dwelling, as designed, is consistent with the DER</b>			
Design air permeability (m <sup>3</sup> /(h.m <sup>2</sup> ) at 50Pa)	No air permeability rate entered	Authorised SAP Assessor	
Mechanical ventilation system Specific fan power (SFP)	Not applicable	Authorised SAP Assessor	
Have the key features of the design been included (or bettered) in practice?	<p>The following party walls have a U-value less than 0.2W/m<sup>2</sup>K:</p> <ul style="list-style-type: none"> <li>Party Walls (0.00)</li> </ul>	Authorised SAP Assessor	

# Predicted Energy Assessment

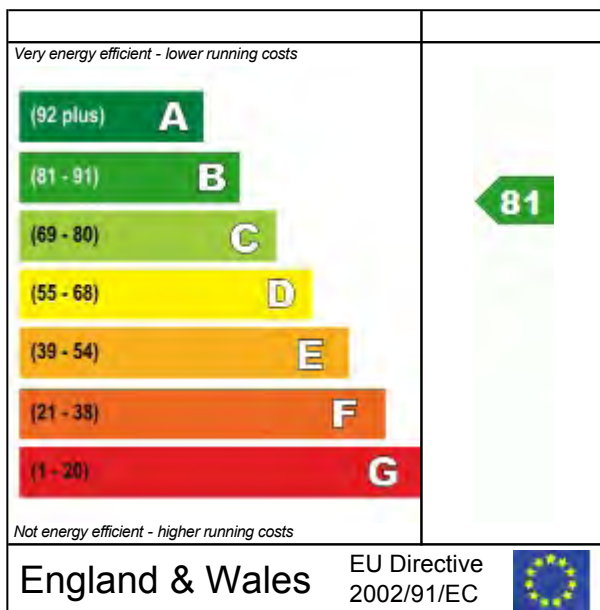
Flat 1  
399 High Road  
London  
N17 6QN

Dwelling type: Ground floor flat  
Date of assessment: 09-Jan-2015  
Produced by: Mr Damian Selim  
Total floor area: 99 m<sup>2</sup>

This is a Predicted Energy Assessment for a property which is not yet complete. It includes a predicted energy rating which might not represent the final energy rating of the property on completion. Once the property is completed, an Energy Performance Certificate is required providing information about the energy performance of the completed property.

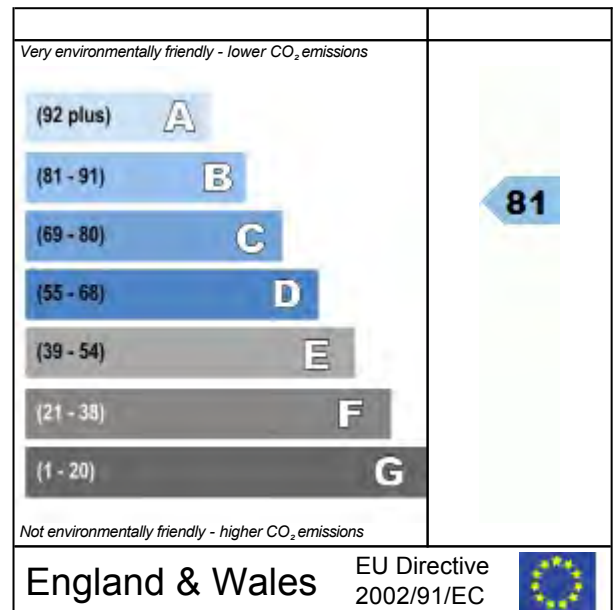
Energy performance has been assessed using the SAP 2009 methodology and is rated in terms of the energy use per square metre of floor area, energy efficiency based on fuel costs and environmental impact based on carbon dioxide (CO<sub>2</sub>) emissions.

## Energy Efficiency Rating



The energy efficiency rating is a measure of the overall efficiency of a home. The higher the rating the more energy efficient the home is and the lower the fuel bills are likely to be.

## Environmental Impact (CO<sub>2</sub>) Rating



The environmental impact rating is a measure of a home's impact on the environment in terms of carbon dioxide (CO<sub>2</sub>) emissions. The higher the rating, the less impact it has on the environment.

# Predicted Energy Assessment

This design final submission provides evidence towards compliance with Part L of the Building Regulations, in accordance with Appendix C of AD L1A. It has been carried out by an On-Construction Domestic Energy Assessor and can be accepted for Building Control purposes without further checking. It has been prepared from plans and specifications and may not reflect the 'as built' property. This report covers only items included within the SAP and is not a complete report of regulations compliance.

Assessor name	Mr Damian Selim	Assessor number	3824
Client		Last modified	11/01/2015
Address	Flat 2 399 High Road, London, N17 6QN		

Check	Evidence	Produced by	OK?																		
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target																					
TER (kg CO <sub>2</sub> /m <sup>2</sup> .a)	Fuel = N/A Fuel factor = 1.00 TER = 14.29	Authorised SAP Assessor																			
DER for dwelling as designed (kg CO <sub>2</sub> /m <sup>2</sup> .a)	DER = 19.72	Authorised SAP Assessor																			
Are emissions from dwelling as designed less than or equal to the target?	DER 19.72 > TER 14.29 Excess emissions = 5.43 kg/m <sup>2</sup> (38.00%)	Authorised SAP Assessor	Failed																		
Is the fabric energy efficiency of the dwelling as designed less than or equal to the target?	DFEE 53.99 > TFEE 36.32 Variance = 17.67 kWh/m <sup>2</sup> (48.65%)	Authorised SAP Assessor	Failed																		
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits																					
Fabric U-values																					
Are all U-values better than the design limits in Table 2?	<table><tr><th>Element</th><th colspan="2">Weighted average Highest</th></tr><tr><td>Wall</td><td>0.30 (max 0.30)</td><td>0.30 (max 0.70)</td></tr><tr><td>Party wall</td><td>0.00 (max 0.20)</td><td>N/A</td></tr><tr><td>Floor</td><td>0.18 (max 0.25)</td><td>0.18 (max 0.70)</td></tr><tr><td>Roof</td><td>(no roof)</td><td></td></tr><tr><td>Openings</td><td>1.89 (max 2.00)</td><td>3.00 (max 3.30)</td></tr></table>	Element	Weighted average Highest		Wall	0.30 (max 0.30)	0.30 (max 0.70)	Party wall	0.00 (max 0.20)	N/A	Floor	0.18 (max 0.25)	0.18 (max 0.70)	Roof	(no roof)		Openings	1.89 (max 2.00)	3.00 (max 3.30)	Authorised SAP Assessor	Passed
Element	Weighted average Highest																				
Wall	0.30 (max 0.30)	0.30 (max 0.70)																			
Party wall	0.00 (max 0.20)	N/A																			
Floor	0.18 (max 0.25)	0.18 (max 0.70)																			
Roof	(no roof)																				
Openings	1.89 (max 2.00)	3.00 (max 3.30)																			
Thermal bridging																					
How has the loss from thermal bridges been calculated?	Thermal bridging calculated using default y-value of 0.15	Authorised SAP Assessor																			
Heating and hot water systems																					
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Main heating system: Mains gas, Combi boiler Boiler Data from manufacturer Efficiency = 89.00% 2009 SEDBUK Minimum = 88.00%  Secondary heating system: None	Authorised SAP Assessor	Passed																		
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	No hot water cylinder	Authorised SAP Assessor																			
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Programmer, room thermostat and TRVs  Hot water control: No hot water cylinder Boiler interlock (main system 1)	Authorised SAP Assessor	Passed																		



Check	Evidence	Produced by	OK?
<b>Fixed internal lighting</b>			
Does fixed internal lighting comply with paragraphs 42 to 44?	<p>Schedule of installed fixed internal lighting</p> <p>Standard lights = 0</p> <p>Low energy lights = 10</p> <p>Percentage of low energy lights = 100%</p> <p>Minimum = 75 %</p>	Authorised SAP Assessor	Passed
<b>Criterion 3: the dwelling has appropriate passive control measures to limit solar gains</b>			
Does the dwelling have a strong tendency to high summertime temperatures?	<p>Overheating risk (June) = Not significant</p> <p>Overheating risk (July) = Slight</p> <p>Overheating risk (August) = Slight</p> <p>Region = Thames</p> <p>Thermal mass parameter = 250.00</p> <p>Ventilation rate in hot weather = 4.00 ach</p> <p>Blinds/curtains = None</p>	Authorised SAP Assessor	Passed
<b>Criterion 4: the performance of the dwelling, as designed, is consistent with the DER</b>			
Design air permeability (m <sup>3</sup> /(h.m <sup>2</sup> ) at 50Pa)	No air permeability rate entered	Authorised SAP Assessor	
Mechanical ventilation system Specific fan power (SFP)	Not applicable	Authorised SAP Assessor	
Have the key features of the design been included (or bettered) in practice?	<p>The following party walls have a U-value less than 0.2W/m<sup>2</sup>K:</p> <ul style="list-style-type: none"> <li>• Party Walls (0.00)</li> </ul>	Authorised SAP Assessor	

# Predicted Energy Assessment

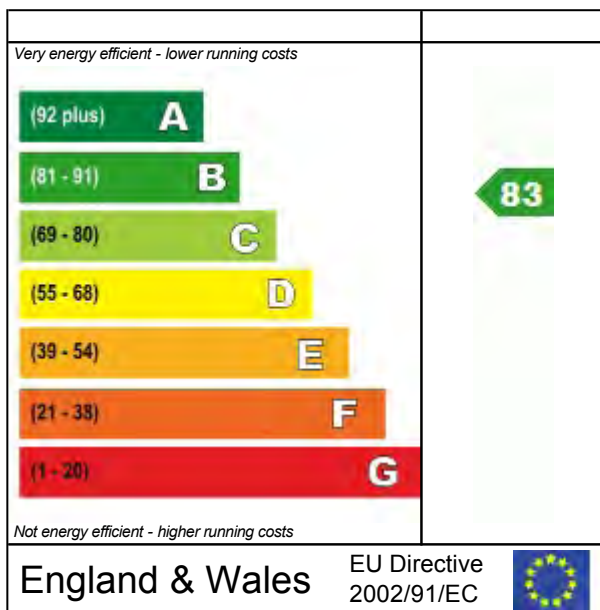
Flat 2  
399 High Road  
London  
N17 6QN

Dwelling type: Ground floor flat  
Date of assessment: 09-Jan-2015  
Produced by: Mr Damian Selim  
Total floor area: 96 m<sup>2</sup>

This is a Predicted Energy Assessment for a property which is not yet complete. It includes a predicted energy rating which might not represent the final energy rating of the property on completion. Once the property is completed, an Energy Performance Certificate is required providing information about the energy performance of the completed property.

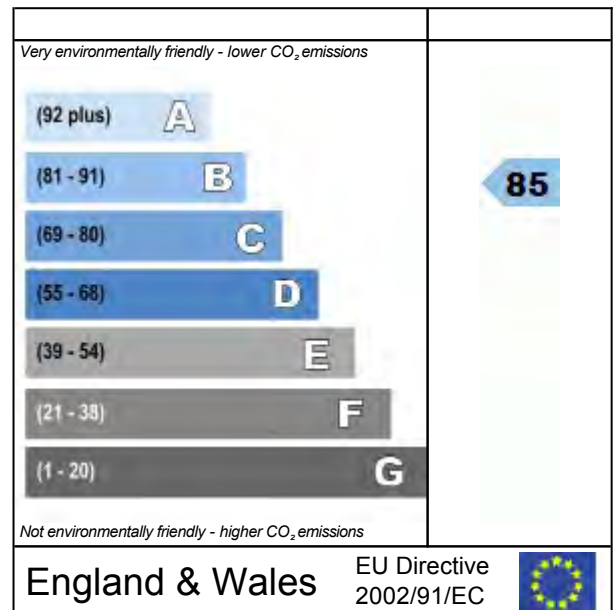
Energy performance has been assessed using the SAP 2009 methodology and is rated in terms of the energy use per square metre of floor area, energy efficiency based on fuel costs and environmental impact based on carbon dioxide (CO<sub>2</sub>) emissions.

## Energy Efficiency Rating



The energy efficiency rating is a measure of the overall efficiency of a home. The higher the rating the more energy efficient the home is and the lower the fuel bills are likely to be.

## Environmental Impact (CO<sub>2</sub>) Rating



The environmental impact rating is a measure of a home's impact on the environment in terms of carbon dioxide (CO<sub>2</sub>) emissions. The higher the rating, the less impact it has on the environment.

# Predicted Energy Assessment

This design final submission provides evidence towards compliance with Part L of the Building Regulations, in accordance with Appendix C of AD L1A. It has been carried out by an On-Construction Domestic Energy Assessor and can be accepted for Building Control purposes without further checking. It has been prepared from plans and specifications and may not reflect the 'as built' property. This report covers only items included within the SAP and is not a complete report of regulations compliance.

Assessor name	Mr Damian Selim	Assessor number	3824
Client		Last modified	11/01/2015
Address	Flat 3 399 High Road, London, N17 6QN		

Check	Evidence	Produced by	OK?																		
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target																					
TER (kg CO <sub>2</sub> /m <sup>2</sup> .a)	Fuel = N/A Fuel factor = 1.00 TER = 18.70	Authorised SAP Assessor																			
DER for dwelling as designed (kg CO <sub>2</sub> /m <sup>2</sup> .a)	DER = 10.37	Authorised SAP Assessor																			
Are emissions from dwelling as designed less than or equal to the target?	DER 10.37 < TER 18.70	Authorised SAP Assessor	Passed																		
Is the fabric energy efficiency of the dwelling as designed less than or equal to the target?	DFEE 45.24 < TFEE 47.90	Authorised SAP Assessor	Passed																		
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits																					
Fabric U-values																					
Are all U-values better than the design limits in Table 2?	<table><tr><th>Element</th><th colspan="2">Weighted average Highest</th></tr><tr><td>Wall</td><td>0.24 (max 0.30)</td><td>0.24 (max 0.70)</td></tr><tr><td>Party wall</td><td>0.00 (max 0.20)</td><td>N/A</td></tr><tr><td>Floor</td><td>0.09 (max 0.25)</td><td>0.09 (max 0.70)</td></tr><tr><td>Roof</td><td>(no roof)</td><td></td></tr><tr><td>Openings</td><td>1.54 (max 2.00)</td><td>1.80 (max 3.30)</td></tr></table>	Element	Weighted average Highest		Wall	0.24 (max 0.30)	0.24 (max 0.70)	Party wall	0.00 (max 0.20)	N/A	Floor	0.09 (max 0.25)	0.09 (max 0.70)	Roof	(no roof)		Openings	1.54 (max 2.00)	1.80 (max 3.30)	Authorised SAP Assessor	Passed
Element	Weighted average Highest																				
Wall	0.24 (max 0.30)	0.24 (max 0.70)																			
Party wall	0.00 (max 0.20)	N/A																			
Floor	0.09 (max 0.25)	0.09 (max 0.70)																			
Roof	(no roof)																				
Openings	1.54 (max 2.00)	1.80 (max 3.30)																			
Thermal bridging																					
How has the loss from thermal bridges been calculated?	Thermal bridging calculated from linear thermal transmittances for each junction	Authorised SAP Assessor																			
Heating and hot water systems																					
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Main heating system: Mains gas, Combi boiler Boiler Data from manufacturer Efficiency = 89.00% 2009 SEDBUK Minimum = 88.00%  Secondary heating system: None	Authorised SAP Assessor	Passed																		
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	No hot water cylinder	Authorised SAP Assessor																			
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Time and temperature zone control - plumbing circuit  Hot water control: No hot water cylinder Boiler interlock (main system 1)	Authorised SAP Assessor	Passed																		

Check	Evidence	Produced by	OK?
<b>Fixed internal lighting</b>			
Does fixed internal lighting comply with paragraphs 42 to 44?	<p>Schedule of installed fixed internal lighting</p> <p>Standard lights = 0</p> <p>Low energy lights = 10</p> <p>Percentage of low energy lights = 100%</p> <p>Minimum = 75 %</p>	Authorised SAP Assessor	Passed
<b>Criterion 3: the dwelling has appropriate passive control measures to limit solar gains</b>			
Does the dwelling have a strong tendency to high summertime temperatures?	<p>Overheating risk (June) = Not significant</p> <p>Overheating risk (July) = Slight</p> <p>Overheating risk (August) = Slight</p> <p>Region = Thames</p> <p>Thermal mass parameter = 250.00</p> <p>Ventilation rate in hot weather = 6.00 ach</p> <p>Blinds/curtains = None</p>	Authorised SAP Assessor	Passed
<b>Criterion 4: the performance of the dwelling, as designed, is consistent with the DER</b>			
Design air permeability (m <sup>3</sup> /(h.m <sup>2</sup> ) at 50Pa)	<p>Design air permeability = 4.00</p> <p>Max air permeability = 10.00</p>	Authorised SAP Assessor	Passed
Mechanical ventilation system Specific fan power (SFP)	Not applicable	Authorised SAP Assessor	
Have the key features of the design been included (or bettered) in practice?	<p>The following party walls have a U-value less than 0.2W/m<sup>2</sup>K:</p> <ul style="list-style-type: none"> <li>• Party Walls (0.00)</li> </ul> <p>The following floors have a U-value less than 0.13W/m<sup>2</sup>K:</p> <ul style="list-style-type: none"> <li>• Over Commercial (0.09)</li> </ul> <p>Use of the following low carbon or renewable technologies:</p> <ul style="list-style-type: none"> <li>• Photovoltaic array</li> </ul>	Authorised SAP Assessor	



# Predicted Energy Assessment

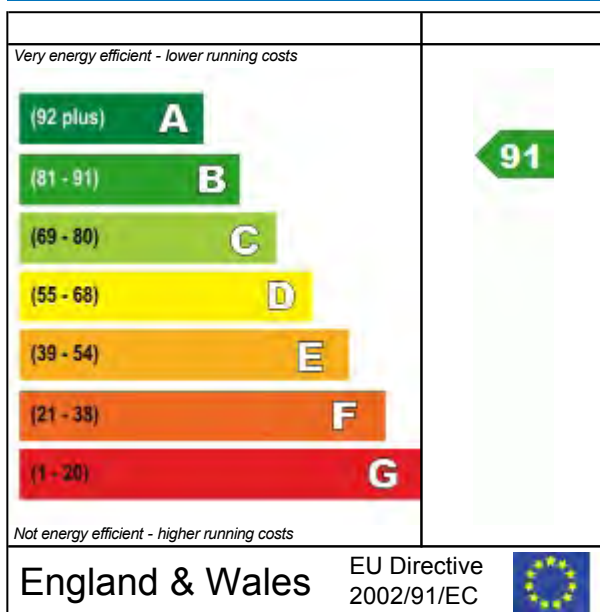
Flat 3  
399 High Road  
London  
N17 6QN

Dwelling type: Mid floor flat  
Date of assessment: 11-Jan-2015  
Produced by: Mr Damian Selim  
Total floor area: 61 m<sup>2</sup>

This is a Predicted Energy Assessment for a property which is not yet complete. It includes a predicted energy rating which might not represent the final energy rating of the property on completion. Once the property is completed, an Energy Performance Certificate is required providing information about the energy performance of the completed property.

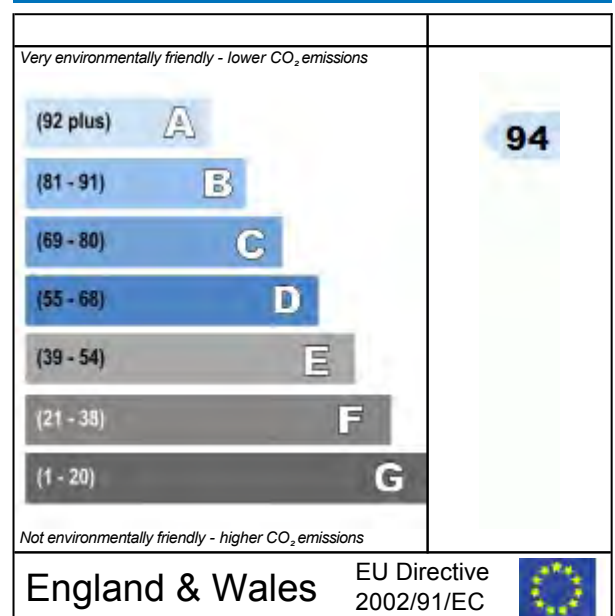
Energy performance has been assessed using the SAP 2009 methodology and is rated in terms of the energy use per square metre of floor area, energy efficiency based on fuel costs and environmental impact based on carbon dioxide (CO<sub>2</sub>) emissions.

## Energy Efficiency Rating



The energy efficiency rating is a measure of the overall efficiency of a home. The higher the rating the more energy efficient the home is and the lower the fuel bills are likely to be.

## Environmental Impact (CO<sub>2</sub>) Rating



The environmental impact rating is a measure of a home's impact on the environment in terms of carbon dioxide (CO<sub>2</sub>) emissions. The higher the rating, the less impact it has on the environment.

# Predicted Energy Assessment

This design final submission provides evidence towards compliance with Part L of the Building Regulations, in accordance with Appendix C of AD L1A. It has been carried out by an On-Construction Domestic Energy Assessor and can be accepted for Building Control purposes without further checking. It has been prepared from plans and specifications and may not reflect the 'as built' property. This report covers only items included within the SAP and is not a complete report of regulations compliance.

Assessor name	Mr Damian Selim	Assessor number	3824
Client		Last modified	11/01/2015
Address	Flat 4 399 High Road, London, N17 6QN		

Check	Evidence	Produced by	OK?																		
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target																					
TER (kg CO <sub>2</sub> /m <sup>2</sup> .a)	Fuel = N/A Fuel factor = 1.00 TER = 20.68	Authorised SAP Assessor																			
DER for dwelling as designed (kg CO <sub>2</sub> /m <sup>2</sup> .a)	DER = 6.36	Authorised SAP Assessor																			
Are emissions from dwelling as designed less than or equal to the target?	DER 6.36 < TER 20.68	Authorised SAP Assessor	Passed																		
Is the fabric energy efficiency of the dwelling as designed less than or equal to the target?	DFEE 42.37 < TFEE 42.68	Authorised SAP Assessor	Passed																		
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits																					
Fabric U-values																					
Are all U-values better than the design limits in Table 2?	<table><tr><th>Element</th><th colspan="2">Weighted average Highest</th></tr><tr><td>Wall</td><td>0.24 (max 0.30)</td><td>0.24 (max 0.70)</td></tr><tr><td>Party wall</td><td>0.00 (max 0.20)</td><td>N/A</td></tr><tr><td>Floor</td><td>0.09 (max 0.25)</td><td>0.09 (max 0.70)</td></tr><tr><td>Roof</td><td>(no roof)</td><td></td></tr><tr><td>Openings</td><td>1.55 (max 2.00)</td><td>1.80 (max 3.30)</td></tr></table>	Element	Weighted average Highest		Wall	0.24 (max 0.30)	0.24 (max 0.70)	Party wall	0.00 (max 0.20)	N/A	Floor	0.09 (max 0.25)	0.09 (max 0.70)	Roof	(no roof)		Openings	1.55 (max 2.00)	1.80 (max 3.30)	Authorised SAP Assessor	Passed
Element	Weighted average Highest																				
Wall	0.24 (max 0.30)	0.24 (max 0.70)																			
Party wall	0.00 (max 0.20)	N/A																			
Floor	0.09 (max 0.25)	0.09 (max 0.70)																			
Roof	(no roof)																				
Openings	1.55 (max 2.00)	1.80 (max 3.30)																			
Thermal bridging																					
How has the loss from thermal bridges been calculated?	Thermal bridging calculated from linear thermal transmittances for each junction	Authorised SAP Assessor																			
Heating and hot water systems																					
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Main heating system: Mains gas, Combi boiler Boiler Data from manufacturer Efficiency = 89.00% 2009 SEDBUK Minimum = 88.00%  Secondary heating system: None	Authorised SAP Assessor	Passed																		
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	No hot water cylinder	Authorised SAP Assessor																			
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Time and temperature zone control - plumbing circuit  Hot water control: No hot water cylinder Boiler interlock (main system 1)	Authorised SAP Assessor	Passed																		

Check	Evidence	Produced by	OK?
<b>Fixed internal lighting</b>			
Does fixed internal lighting comply with paragraphs 42 to 44?	<p>Schedule of installed fixed internal lighting</p> <p>Standard lights = 0</p> <p>Low energy lights = 10</p> <p>Percentage of low energy lights = 100%</p> <p>Minimum = 75 %</p>	Authorised SAP Assessor	Passed
<b>Criterion 3: the dwelling has appropriate passive control measures to limit solar gains</b>			
Does the dwelling have a strong tendency to high summertime temperatures?	<p>Overheating risk (June) = Slight</p> <p>Overheating risk (July) = Medium</p> <p>Overheating risk (August) = Medium</p> <p>Region = Thames</p> <p>Thermal mass parameter = 100.00</p> <p>Ventilation rate in hot weather = 6.00 ach</p> <p>Blinds/curtains = None</p>	Authorised SAP Assessor	Passed
<b>Criterion 4: the performance of the dwelling, as designed, is consistent with the DER</b>			
Design air permeability (m <sup>3</sup> /(h.m <sup>2</sup> ) at 50Pa)	<p>Design air permeability = 4.00</p> <p>Max air permeability = 10.00</p>	Authorised SAP Assessor	Passed
Mechanical ventilation system Specific fan power (SFP)	Not applicable	Authorised SAP Assessor	
Have the key features of the design been included (or bettered) in practice?	<p>The following party walls have a U-value less than 0.2W/m<sup>2</sup>K:</p> <ul style="list-style-type: none"> <li>• Party Walls (0.00)</li> </ul> <p>The following floors have a U-value less than 0.13W/m<sup>2</sup>K:</p> <ul style="list-style-type: none"> <li>• Over Commercial (0.09)</li> </ul> <p>Use of the following low carbon or renewable technologies:</p> <ul style="list-style-type: none"> <li>• Photovoltaic array</li> </ul>	Authorised SAP Assessor	

# Predicted Energy Assessment

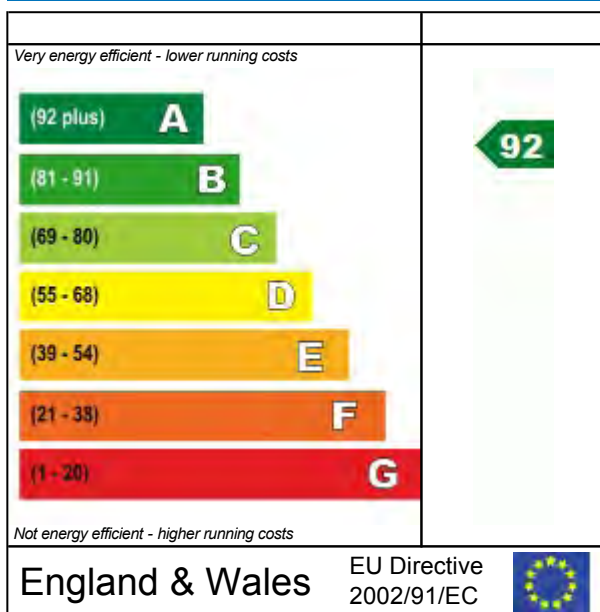
Flat 4  
399 High Road  
London  
N17 6QN

Dwelling type: Mid floor flat  
Date of assessment: 11-Jan-2015  
Produced by: Mr Damian Selim  
Total floor area: 36 m<sup>2</sup>

This is a Predicted Energy Assessment for a property which is not yet complete. It includes a predicted energy rating which might not represent the final energy rating of the property on completion. Once the property is completed, an Energy Performance Certificate is required providing information about the energy performance of the completed property.

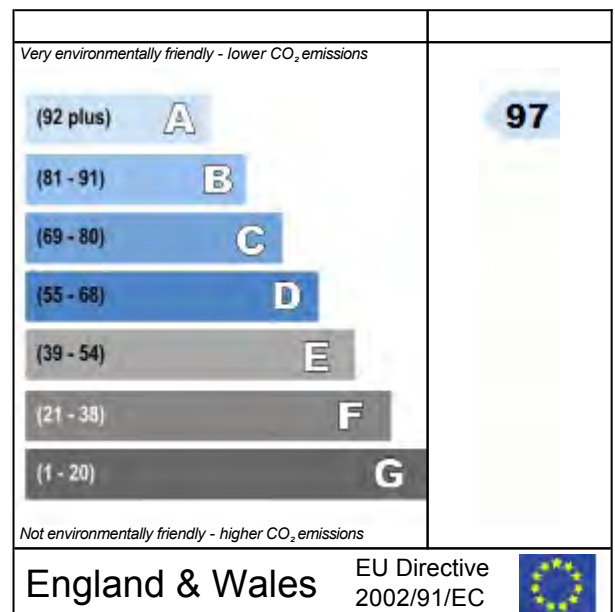
Energy performance has been assessed using the SAP 2009 methodology and is rated in terms of the energy use per square metre of floor area, energy efficiency based on fuel costs and environmental impact based on carbon dioxide (CO<sub>2</sub>) emissions.

## Energy Efficiency Rating



The energy efficiency rating is a measure of the overall efficiency of a home. The higher the rating the more energy efficient the home is and the lower the fuel bills are likely to be.

## Environmental Impact (CO<sub>2</sub>) Rating



The environmental impact rating is a measure of a home's impact on the environment in terms of carbon dioxide (CO<sub>2</sub>) emissions. The higher the rating, the less impact it has on the environment.

# Predicted Energy Assessment



This design final submission provides evidence towards compliance with Part L of the Building Regulations, in accordance with Appendix C of AD L1A. It has been carried out by an On-Construction Domestic Energy Assessor and can be accepted for Building Control purposes without further checking. It has been prepared from plans and specifications and may not reflect the 'as built' property. This report covers only items included within the SAP and is not a complete report of regulations compliance.

Assessor name	Mr Damian Selim	Assessor number	3824
Client		Last modified	11/01/2015
Address	Flat 5 399 High Road, London, N17 6QN		

Check	Evidence	Produced by	OK?																		
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target																					
TER (kg CO <sub>2</sub> /m <sup>2</sup> .a)	Fuel = N/A Fuel factor = 1.00 TER = 18.73	Authorised SAP Assessor																			
DER for dwelling as designed (kg CO <sub>2</sub> /m <sup>2</sup> .a)	DER = 10.32	Authorised SAP Assessor																			
Are emissions from dwelling as designed less than or equal to the target?	DER 10.32 < TER 18.73	Authorised SAP Assessor	Passed																		
Is the fabric energy efficiency of the dwelling as designed less than or equal to the target?	DFEE 42.86 < TFEE 46.44	Authorised SAP Assessor	Passed																		
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits																					
Fabric U-values																					
Are all U-values better than the design limits in Table 2?	<table><tr><th>Element</th><th colspan="2">Weighted average Highest</th></tr><tr><td>Wall</td><td>0.24 (max 0.30)</td><td>0.24 (max 0.70)</td></tr><tr><td>Party wall</td><td>0.00 (max 0.20)</td><td>N/A</td></tr><tr><td>Floor</td><td>0.09 (max 0.25)</td><td>0.09 (max 0.70)</td></tr><tr><td>Roof</td><td>(no roof)</td><td></td></tr><tr><td>Openings</td><td>1.55 (max 2.00)</td><td>1.80 (max 3.30)</td></tr></table>	Element	Weighted average Highest		Wall	0.24 (max 0.30)	0.24 (max 0.70)	Party wall	0.00 (max 0.20)	N/A	Floor	0.09 (max 0.25)	0.09 (max 0.70)	Roof	(no roof)		Openings	1.55 (max 2.00)	1.80 (max 3.30)	Authorised SAP Assessor	Passed
Element	Weighted average Highest																				
Wall	0.24 (max 0.30)	0.24 (max 0.70)																			
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Floor	0.09 (max 0.25)	0.09 (max 0.70)																			
Roof	(no roof)																				
Openings	1.55 (max 2.00)	1.80 (max 3.30)																			
Thermal bridging																					
How has the loss from thermal bridges been calculated?	Thermal bridging calculated from linear thermal transmittances for each junction	Authorised SAP Assessor																			
Heating and hot water systems																					
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Main heating system: Mains gas, Combi boiler Boiler Data from manufacturer Efficiency = 89.00% 2009 SEDBUK Minimum = 88.00%  Secondary heating system: None	Authorised SAP Assessor	Passed																		
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	No hot water cylinder	Authorised SAP Assessor																			
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Time and temperature zone control - plumbing circuit  Hot water control: No hot water cylinder Boiler interlock (main system 1)	Authorised SAP Assessor	Passed																		

Check	Evidence	Produced by	OK?
<b>Fixed internal lighting</b>			
Does fixed internal lighting comply with paragraphs 42 to 44?	<p>Schedule of installed fixed internal lighting</p> <p>Standard lights = 0</p> <p>Low energy lights = 10</p> <p>Percentage of low energy lights = 100%</p> <p>Minimum = 75 %</p>	Authorised SAP Assessor	Passed
<b>Criterion 3: the dwelling has appropriate passive control measures to limit solar gains</b>			
Does the dwelling have a strong tendency to high summertime temperatures?	<p>Overheating risk (June) = Not significant</p> <p>Overheating risk (July) = Slight</p> <p>Overheating risk (August) = Slight</p> <p>Region = Thames</p> <p>Thermal mass parameter = 250.00</p> <p>Ventilation rate in hot weather = 4.00 ach</p> <p>Blinds/curtains = None</p>	Authorised SAP Assessor	Passed
<b>Criterion 4: the performance of the dwelling, as designed, is consistent with the DER</b>			
Design air permeability (m <sup>3</sup> /(h.m <sup>2</sup> ) at 50Pa)	<p>Design air permeability = 4.00</p> <p>Max air permeability = 10.00</p>	Authorised SAP Assessor	Passed
Mechanical ventilation system Specific fan power (SFP)	Not applicable	Authorised SAP Assessor	
Have the key features of the design been included (or bettered) in practice?	<p>The following party walls have a U-value less than 0.2W/m<sup>2</sup>K:</p> <ul style="list-style-type: none"> <li>• Party Walls (0.00)</li> </ul> <p>The following floors have a U-value less than 0.13W/m<sup>2</sup>K:</p> <ul style="list-style-type: none"> <li>• Over Commercial (0.09)</li> </ul> <p>Use of the following low carbon or renewable technologies:</p> <ul style="list-style-type: none"> <li>• Photovoltaic array</li> </ul>	Authorised SAP Assessor	

# Predicted Energy Assessment

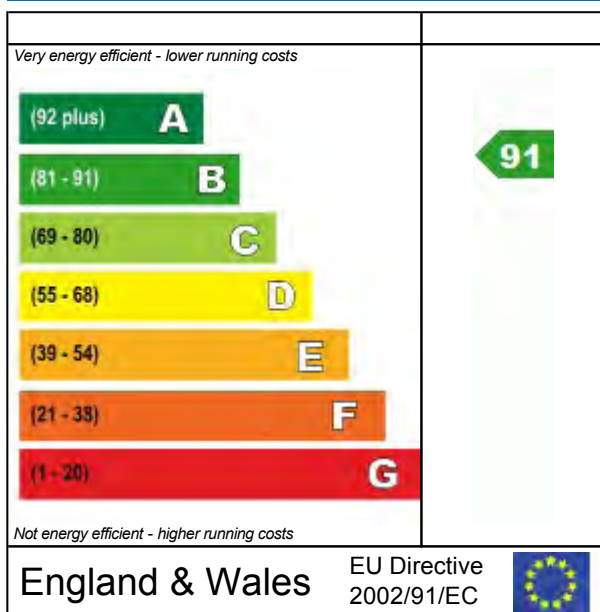
Flat 5  
399 High Road  
London  
N17 6QN

Dwelling type: Mid floor flat  
Date of assessment: 11-Jan-2015  
Produced by: Mr Damian Selim  
Total floor area: 61 m<sup>2</sup>

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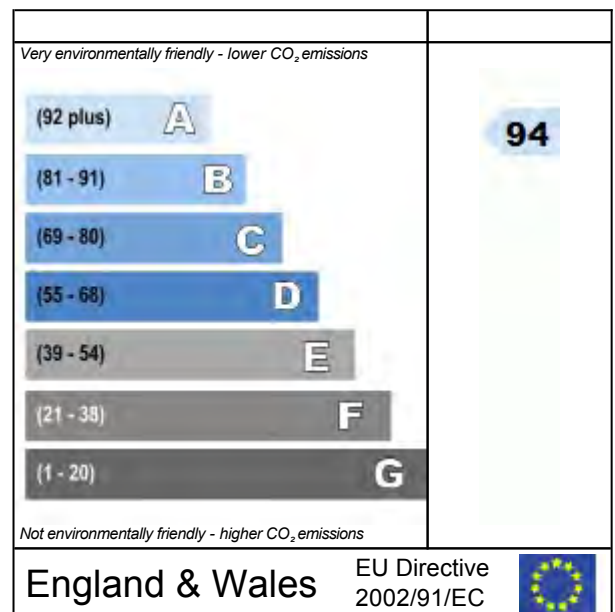
Energy performance has been assessed using the SAP 2009 methodology and is rated in terms of the energy use per square metre of floor area, energy efficiency based on fuel costs and environmental impact based on carbon dioxide (CO<sub>2</sub>) emissions.

## Energy Efficiency Rating



The energy efficiency rating is a measure of the overall efficiency of a home. The higher the rating the more energy efficient the home is and the lower the fuel bills are likely to be.

## Environmental Impact (CO<sub>2</sub>) Rating



The environmental impact rating is a measure of a home's impact on the environment in terms of carbon dioxide (CO<sub>2</sub>) emissions. The higher the rating, the less impact it has on the environment.

# Predicted Energy Assessment

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Assessor name	Mr Damian Selim	Assessor number	3824
Client		Last modified	11/01/2015
Address	Flat 6 399 High Road, London, N17 6QN		

Check	Evidence	Produced by	OK?																		
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target																					
TER (kg CO <sub>2</sub> /m <sup>2</sup> .a)	Fuel = N/A Fuel factor = 1.00 TER = 23.69	Authorised SAP Assessor																			
DER for dwelling as designed (kg CO <sub>2</sub> /m <sup>2</sup> .a)	DER = 15.13	Authorised SAP Assessor																			
Are emissions from dwelling as designed less than or equal to the target?	DER 15.13 < TER 23.69	Authorised SAP Assessor	Passed																		
Is the fabric energy efficiency of the dwelling as designed less than or equal to the target?	DFEE 67.29 < TFEE 71.16	Authorised SAP Assessor	Passed																		
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits																					
Fabric U-values																					
Are all U-values better than the design limits in Table 2?	<table><tr><th>Element</th><th colspan="2">Weighted average Highest</th></tr><tr><td>Wall</td><td>0.24 (max 0.30)</td><td>0.24 (max 0.70)</td></tr><tr><td>Party wall</td><td>0.00 (max 0.20)</td><td>N/A</td></tr><tr><td>Floor</td><td>0.14 (max 0.25)</td><td>0.18 (max 0.70)</td></tr><tr><td>Roof</td><td>0.15 (max 0.20)</td><td>0.15 (max 0.35)</td></tr><tr><td>Openings</td><td>1.55 (max 2.00)</td><td>1.80 (max 3.30)</td></tr></table>	Element	Weighted average Highest		Wall	0.24 (max 0.30)	0.24 (max 0.70)	Party wall	0.00 (max 0.20)	N/A	Floor	0.14 (max 0.25)	0.18 (max 0.70)	Roof	0.15 (max 0.20)	0.15 (max 0.35)	Openings	1.55 (max 2.00)	1.80 (max 3.30)	Authorised SAP Assessor	Passed
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Thermal bridging																					
How has the loss from thermal bridges been calculated?	Thermal bridging calculated from linear thermal transmittances for each junction	Authorised SAP Assessor																			
Heating and hot water systems																					
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Main heating system: Mains gas, Combi boiler Boiler Data from manufacturer Efficiency = 89.00% 2009 SEDBUK Minimum = 88.00%  Secondary heating system: None	Authorised SAP Assessor	Passed																		
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	No hot water cylinder	Authorised SAP Assessor																			
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Time and temperature zone control - plumbing circuit  Hot water control: No hot water cylinder Boiler interlock (main system 1)	Authorised SAP Assessor	Passed																		



Check	Evidence	Produced by	OK?
<b>Fixed internal lighting</b>			
Does fixed internal lighting comply with paragraphs 42 to 44?	<p>Schedule of installed fixed internal lighting</p> <p>Standard lights = 0</p> <p>Low energy lights = 10</p> <p>Percentage of low energy lights = 100%</p> <p>Minimum = 75 %</p>	Authorised SAP Assessor	Passed
<b>Criterion 3: the dwelling has appropriate passive control measures to limit solar gains</b>			
Does the dwelling have a strong tendency to high summertime temperatures?	<p>Overheating risk (June) = Not significant</p> <p>Overheating risk (July) = Slight</p> <p>Overheating risk (August) = Slight</p> <p>Region = Thames</p> <p>Thermal mass parameter = 250.00</p> <p>Ventilation rate in hot weather = 4.00 ach</p> <p>Blinds/curtains = None</p>	Authorised SAP Assessor	Passed
<b>Criterion 4: the performance of the dwelling, as designed, is consistent with the DER</b>			
Design air permeability (m <sup>3</sup> /(h.m <sup>2</sup> ) at 50Pa)	<p>Design air permeability = 4.00</p> <p>Max air permeability = 10.00</p>	Authorised SAP Assessor	Passed
Mechanical ventilation system Specific fan power (SFP)	Not applicable	Authorised SAP Assessor	
Have the key features of the design been included (or bettered) in practice?	<p>The following party walls have a U-value less than 0.2W/m<sup>2</sup>K:</p> <ul style="list-style-type: none"> <li>• Party Walls (0.00)</li> </ul> <p>The following floors have a U-value less than 0.13W/m<sup>2</sup>K:</p> <ul style="list-style-type: none"> <li>• Over Commercial (0.09)</li> </ul> <p>Use of the following low carbon or renewable technologies:</p> <ul style="list-style-type: none"> <li>• Photovoltaic array</li> </ul>	Authorised SAP Assessor	

# Predicted Energy Assessment

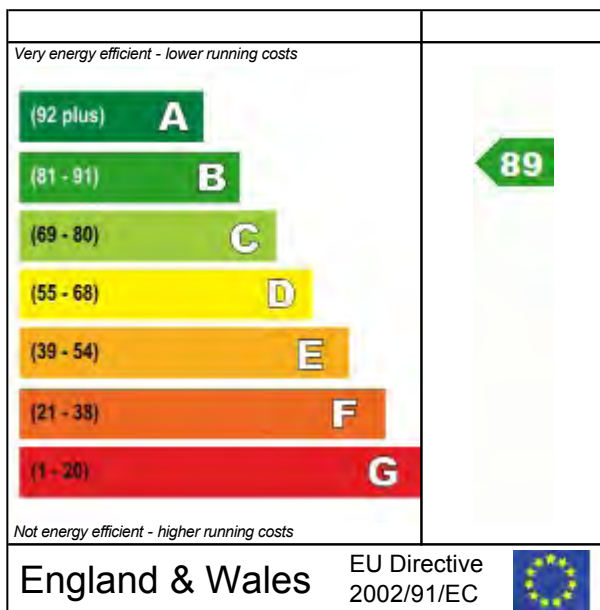
Flat 6  
399 High Road  
London  
N17 6QN

Dwelling type: Mid floor flat  
Date of assessment: 11-Jan-2015  
Produced by: Mr Damian Selim  
Total floor area: 56 m<sup>2</sup>

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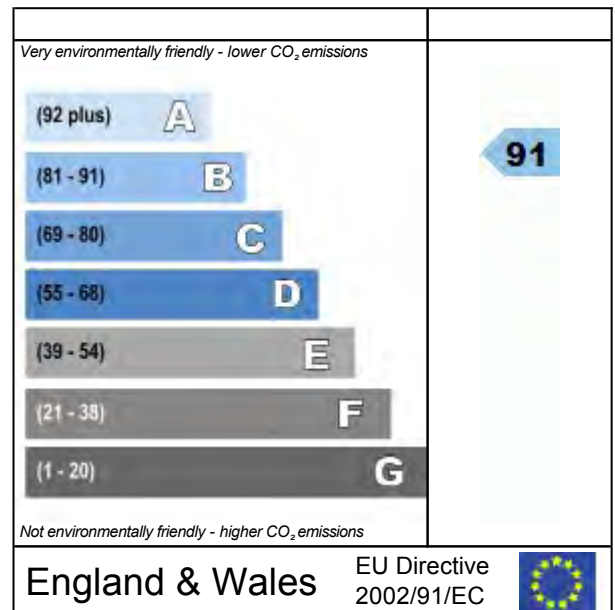
Energy performance has been assessed using the SAP 2009 methodology and is rated in terms of the energy use per square metre of floor area, energy efficiency based on fuel costs and environmental impact based on carbon dioxide (CO<sub>2</sub>) emissions.

## Energy Efficiency Rating



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## Environmental Impact (CO<sub>2</sub>) Rating



The environmental impact rating is a measure of a home's impact on the environment in terms of carbon dioxide (CO<sub>2</sub>) emissions. The higher the rating, the less impact it has on the environment.

# Predicted Energy Assessment

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Assessor name	Mr Damian Selim	Assessor number	3824
Client		Last modified	11/01/2015
Address	Flat 7 399 High Road, London, N17 6QN		

Check	Evidence	Produced by	OK?																		
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target																					
TER (kg CO <sub>2</sub> /m <sup>2</sup> .a)	Fuel = N/A Fuel factor = 1.00 TER = 14.90	Authorised SAP Assessor																			
DER for dwelling as designed (kg CO <sub>2</sub> /m <sup>2</sup> .a)	DER = 10.29	Authorised SAP Assessor																			
Are emissions from dwelling as designed less than or equal to the target?	DER 10.29 < TER 14.90	Authorised SAP Assessor	Passed																		
Is the fabric energy efficiency of the dwelling as designed less than or equal to the target?	DFEE 39.68 < TFEE 39.86	Authorised SAP Assessor	Passed																		
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits																					
Fabric U-values																					
Are all U-values better than the design limits in Table 2?	<table><thead><tr><th>Element</th><th colspan="2">Weighted average Highest</th></tr></thead><tbody><tr><td>Wall</td><td>0.24 (max 0.30)</td><td>0.24 (max 0.70)</td></tr><tr><td>Party wall</td><td>0.00 (max 0.20)</td><td>N/A</td></tr><tr><td>Floor</td><td>(no floor)</td><td></td></tr><tr><td>Roof</td><td>(no roof)</td><td></td></tr><tr><td>Openings</td><td>1.52 (max 2.00)</td><td>1.80 (max 3.30)</td></tr></tbody></table>	Element	Weighted average Highest		Wall	0.24 (max 0.30)	0.24 (max 0.70)	Party wall	0.00 (max 0.20)	N/A	Floor	(no floor)		Roof	(no roof)		Openings	1.52 (max 2.00)	1.80 (max 3.30)	Authorised SAP Assessor	Passed
Element	Weighted average Highest																				
Wall	0.24 (max 0.30)	0.24 (max 0.70)																			
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Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Main heating system: Mains gas, Combi boiler Boiler Data from manufacturer Efficiency = 89.00% 2009 SEDBUK Minimum = 88.00%  Secondary heating system: None	Authorised SAP Assessor	Passed																		
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	No hot water cylinder	Authorised SAP Assessor																			
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Time and temperature zone control - plumbing circuit  Hot water control: No hot water cylinder Boiler interlock (main system 1)	Authorised SAP Assessor	Passed																		

Check	Evidence	Produced by	OK?
<b>Fixed internal lighting</b>			
Does fixed internal lighting comply with paragraphs 42 to 44?	<p>Schedule of installed fixed internal lighting</p> <p>Standard lights = 0</p> <p>Low energy lights = 10</p> <p>Percentage of low energy lights = 100%</p> <p>Minimum = 75 %</p>	Authorised SAP Assessor	Passed
<b>Criterion 3: the dwelling has appropriate passive control measures to limit solar gains</b>			
Does the dwelling have a strong tendency to high summertime temperatures?	<p>Overheating risk (June) = Slight</p> <p>Overheating risk (July) = Medium</p> <p>Overheating risk (August) = Slight</p> <p>Region = Thames</p> <p>Thermal mass parameter = 250.00</p> <p>Ventilation rate in hot weather = 4.00 ach</p> <p>Blinds/curtains = None</p>	Authorised SAP Assessor	Passed
<b>Criterion 4: the performance of the dwelling, as designed, is consistent with the DER</b>			
Design air permeability (m <sup>3</sup> /(h.m <sup>2</sup> ) at 50Pa)	<p>Design air permeability = 4.00</p> <p>Max air permeability = 10.00</p>	Authorised SAP Assessor	Passed
Mechanical ventilation system Specific fan power (SFP)	Not applicable	Authorised SAP Assessor	
Have the key features of the design been included (or bettered) in practice?	<p>The following party walls have a U-value less than 0.2W/m<sup>2</sup>K:</p> <ul style="list-style-type: none"> <li>Party Walls (0.00)</li> </ul> <p>Use of the following low carbon or renewable technologies:</p> <ul style="list-style-type: none"> <li>Photovoltaic array</li> </ul>	Authorised SAP Assessor	



# Predicted Energy Assessment

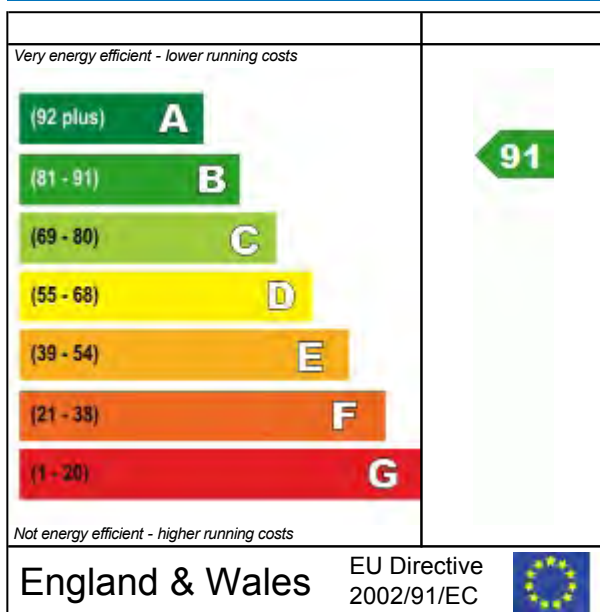
Flat 7  
399 High Road  
London  
N17 6QN

Dwelling type: Mid floor flat  
Date of assessment: 11-Jan-2015  
Produced by: Mr Damian Selim  
Total floor area: 96 m<sup>2</sup>

This is a Predicted Energy Assessment for a property which is not yet complete. It includes a predicted energy rating which might not represent the final energy rating of the property on completion. Once the property is completed, an Energy Performance Certificate is required providing information about the energy performance of the completed property.

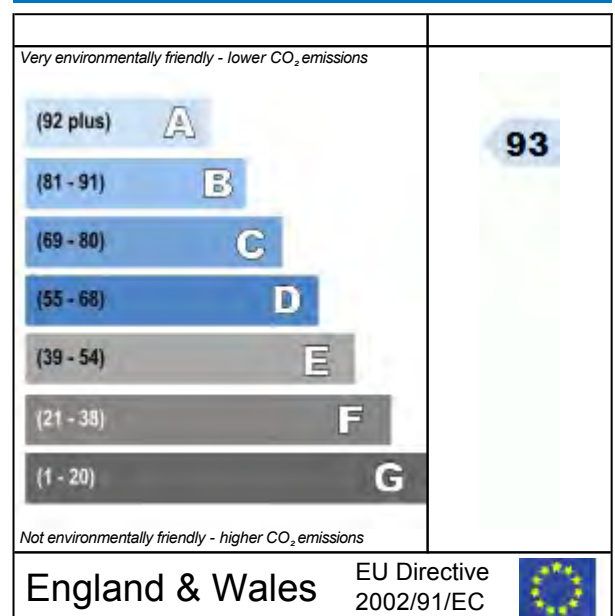
Energy performance has been assessed using the SAP 2009 methodology and is rated in terms of the energy use per square metre of floor area, energy efficiency based on fuel costs and environmental impact based on carbon dioxide (CO<sub>2</sub>) emissions.

## Energy Efficiency Rating



The energy efficiency rating is a measure of the overall efficiency of a home. The higher the rating the more energy efficient the home is and the lower the fuel bills are likely to be.

## Environmental Impact (CO<sub>2</sub>) Rating



The environmental impact rating is a measure of a home's impact on the environment in terms of carbon dioxide (CO<sub>2</sub>) emissions. The higher the rating, the less impact it has on the environment.

# Predicted Energy Assessment

This design final submission provides evidence towards compliance with Part L of the Building Regulations, in accordance with Appendix C of AD L1A. It has been carried out by an On-Construction Domestic Energy Assessor and can be accepted for Building Control purposes without further checking. It has been prepared from plans and specifications and may not reflect the 'as built' property. This report covers only items included within the SAP and is not a complete report of regulations compliance.

Assessor name	Mr Damian Selim	Assessor number	3824
Client		Last modified	11/01/2015
Address	Flat 8 399 High Road, London, N17 6QN		

Check	Evidence	Produced by	OK?																		
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target																					
TER (kg CO <sub>2</sub> /m <sup>2</sup> .a)	Fuel = N/A Fuel factor = 1.00 TER = 16.10	Authorised SAP Assessor																			
DER for dwelling as designed (kg CO <sub>2</sub> /m <sup>2</sup> .a)	DER = 9.17	Authorised SAP Assessor																			
Are emissions from dwelling as designed less than or equal to the target?	DER 9.17 < TER 16.10	Authorised SAP Assessor	Passed																		
Is the fabric energy efficiency of the dwelling as designed less than or equal to the target?	DFEE 35.09 < TFEE 35.40	Authorised SAP Assessor	Passed																		
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits																					
Fabric U-values																					
Are all U-values better than the design limits in Table 2?	<table><tr><th>Element</th><th colspan="2">Weighted average Highest</th></tr><tr><td>Wall</td><td>0.24 (max 0.30)</td><td>0.24 (max 0.70)</td></tr><tr><td>Party wall</td><td>0.00 (max 0.20)</td><td>N/A</td></tr><tr><td>Floor</td><td>(no floor)</td><td></td></tr><tr><td>Roof</td><td>(no roof)</td><td></td></tr><tr><td>Openings</td><td>1.55 (max 2.00)</td><td>1.80 (max 3.30)</td></tr></table>	Element	Weighted average Highest		Wall	0.24 (max 0.30)	0.24 (max 0.70)	Party wall	0.00 (max 0.20)	N/A	Floor	(no floor)		Roof	(no roof)		Openings	1.55 (max 2.00)	1.80 (max 3.30)	Authorised SAP Assessor	Passed
Element	Weighted average Highest																				
Wall	0.24 (max 0.30)	0.24 (max 0.70)																			
Party wall	0.00 (max 0.20)	N/A																			
Floor	(no floor)																				
Roof	(no roof)																				
Openings	1.55 (max 2.00)	1.80 (max 3.30)																			
Thermal bridging																					
How has the loss from thermal bridges been calculated?	Thermal bridging calculated from linear thermal transmittances for each junction	Authorised SAP Assessor																			
Heating and hot water systems																					
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Main heating system: Mains gas, Combi boiler Boiler Data from manufacturer Efficiency = 89.00% 2009 SEDBUK Minimum = 88.00%  Secondary heating system: None	Authorised SAP Assessor	Passed																		
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	No hot water cylinder	Authorised SAP Assessor																			
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Time and temperature zone control - plumbing circuit  Hot water control: No hot water cylinder Boiler interlock (main system 1)	Authorised SAP Assessor	Passed																		

Check	Evidence	Produced by	OK?
<b>Fixed internal lighting</b>			
Does fixed internal lighting comply with paragraphs 42 to 44?	<p>Schedule of installed fixed internal lighting</p> <p>Standard lights = 0</p> <p>Low energy lights = 10</p> <p>Percentage of low energy lights = 100%</p> <p>Minimum = 75 %</p>	Authorised SAP Assessor	Passed
<b>Criterion 3: the dwelling has appropriate passive control measures to limit solar gains</b>			
Does the dwelling have a strong tendency to high summertime temperatures?	<p>Overheating risk (June) = Not significant</p> <p>Overheating risk (July) = Slight</p> <p>Overheating risk (August) = Slight</p> <p>Region = Thames</p> <p>Thermal mass parameter = 250.00</p> <p>Ventilation rate in hot weather = 4.00 ach</p> <p>Blinds/curtains = None</p>	Authorised SAP Assessor	Passed
<b>Criterion 4: the performance of the dwelling, as designed, is consistent with the DER</b>			
Design air permeability (m <sup>3</sup> /(h.m <sup>2</sup> ) at 50Pa)	<p>Design air permeability = 4.00</p> <p>Max air permeability = 10.00</p>	Authorised SAP Assessor	Passed
Mechanical ventilation system Specific fan power (SFP)	Not applicable	Authorised SAP Assessor	
Have the key features of the design been included (or bettered) in practice?	<p>The following party walls have a U-value less than 0.2W/m<sup>2</sup>K:</p> <ul style="list-style-type: none"> <li>• Party Walls (0.00)</li> </ul> <p>Use of the following low carbon or renewable technologies:</p> <ul style="list-style-type: none"> <li>• Photovoltaic array</li> </ul>	Authorised SAP Assessor	

# Predicted Energy Assessment

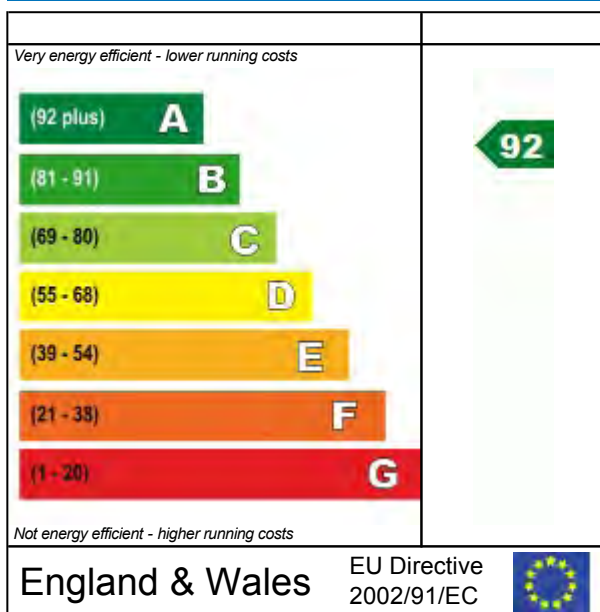
Flat 8  
399 High Road  
London  
N17 6QN

Dwelling type: Mid floor flat  
Date of assessment: 11-Jan-2015  
Produced by: Mr Damian Selim  
Total floor area: 70 m<sup>2</sup>

This is a Predicted Energy Assessment for a property which is not yet complete. It includes a predicted energy rating which might not represent the final energy rating of the property on completion. Once the property is completed, an Energy Performance Certificate is required providing information about the energy performance of the completed property.

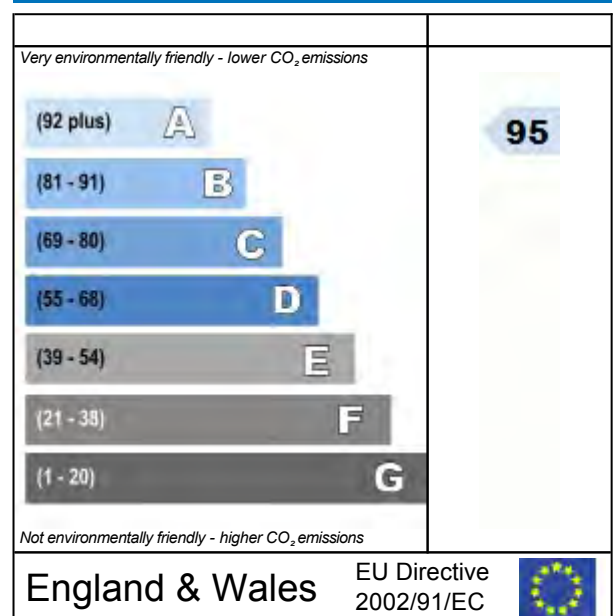
Energy performance has been assessed using the SAP 2009 methodology and is rated in terms of the energy use per square metre of floor area, energy efficiency based on fuel costs and environmental impact based on carbon dioxide (CO<sub>2</sub>) emissions.

## Energy Efficiency Rating



The energy efficiency rating is a measure of the overall efficiency of a home. The higher the rating the more energy efficient the home is and the lower the fuel bills are likely to be.

## Environmental Impact (CO<sub>2</sub>) Rating



The environmental impact rating is a measure of a home's impact on the environment in terms of carbon dioxide (CO<sub>2</sub>) emissions. The higher the rating, the less impact it has on the environment.

# Predicted Energy Assessment



This design final submission provides evidence towards compliance with Part L of the Building Regulations, in accordance with Appendix C of AD L1A. It has been carried out by an On-Construction Domestic Energy Assessor and can be accepted for Building Control purposes without further checking. It has been prepared from plans and specifications and may not reflect the 'as built' property. This report covers only items included within the SAP and is not a complete report of regulations compliance.

Assessor name	Mr Damian Selim	Assessor number	3824
Client		Last modified	11/01/2015
Address	Flat 9 399 High Road, London, N17 6QN		

Check	Evidence	Produced by	OK?																		
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target																					
TER (kg CO <sub>2</sub> /m <sup>2</sup> .a)	Fuel = N/A Fuel factor = 1.00 TER = 17.60	Authorised SAP Assessor																			
DER for dwelling as designed (kg CO <sub>2</sub> /m <sup>2</sup> .a)	DER = 11.54	Authorised SAP Assessor																			
Are emissions from dwelling as designed less than or equal to the target?	DER 11.54 < TER 17.60	Authorised SAP Assessor	Passed																		
Is the fabric energy efficiency of the dwelling as designed less than or equal to the target?	DFEE 43.76 < TFEF 46.27	Authorised SAP Assessor	Passed																		
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits																					
Fabric U-values																					
Are all U-values better than the design limits in Table 2?	<table><thead><tr><th>Element</th><th colspan="2">Weighted average Highest</th></tr></thead><tbody><tr><td>Wall</td><td>0.24 (max 0.30)</td><td>0.24 (max 0.70)</td></tr><tr><td>Party wall</td><td>0.00 (max 0.20)</td><td>N/A</td></tr><tr><td>Floor</td><td colspan="2">(no floor)</td></tr><tr><td>Roof</td><td>0.15 (max 0.20)</td><td>0.15 (max 0.35)</td></tr><tr><td>Openings</td><td>1.55 (max 2.00)</td><td>1.80 (max 3.30)</td></tr></tbody></table>	Element	Weighted average Highest		Wall	0.24 (max 0.30)	0.24 (max 0.70)	Party wall	0.00 (max 0.20)	N/A	Floor	(no floor)		Roof	0.15 (max 0.20)	0.15 (max 0.35)	Openings	1.55 (max 2.00)	1.80 (max 3.30)	Authorised SAP Assessor	Passed
Element	Weighted average Highest																				
Wall	0.24 (max 0.30)	0.24 (max 0.70)																			
Party wall	0.00 (max 0.20)	N/A																			
Floor	(no floor)																				
Roof	0.15 (max 0.20)	0.15 (max 0.35)																			
Openings	1.55 (max 2.00)	1.80 (max 3.30)																			
Thermal bridging																					
How has the loss from thermal bridges been calculated?	Thermal bridging calculated from linear thermal transmittances for each junction	Authorised SAP Assessor																			
Heating and hot water systems																					
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Main heating system: Mains gas, Combi boiler Boiler Data from manufacturer Efficiency = 89.00% 2009 SEDBUK Minimum = 88.00%  Secondary heating system: None	Authorised SAP Assessor	Passed																		
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	No hot water cylinder	Authorised SAP Assessor																			
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Time and temperature zone control - plumbing circuit  Hot water control: No hot water cylinder Boiler interlock (main system 1)	Authorised SAP Assessor	Passed																		

Check	Evidence	Produced by	OK?
<b>Fixed internal lighting</b>			
Does fixed internal lighting comply with paragraphs 42 to 44?	<p>Schedule of installed fixed internal lighting</p> <p>Standard lights = 0</p> <p>Low energy lights = 10</p> <p>Percentage of low energy lights = 100%</p> <p>Minimum = 75 %</p>	Authorised SAP Assessor	Passed
<b>Criterion 3: the dwelling has appropriate passive control measures to limit solar gains</b>			
Does the dwelling have a strong tendency to high summertime temperatures?	<p>Overheating risk (June) = Not significant</p> <p>Overheating risk (July) = Not significant</p> <p>Overheating risk (August) = Not significant</p> <p>Region = Thames</p> <p>Thermal mass parameter = 250.00</p> <p>Ventilation rate in hot weather = 4.00 ach</p> <p>Blinds/curtains = None</p>	Authorised SAP Assessor	Passed
<b>Criterion 4: the performance of the dwelling, as designed, is consistent with the DER</b>			
Design air permeability (m <sup>3</sup> /(h.m <sup>2</sup> ) at 50Pa)	<p>Design air permeability = 4.00</p> <p>Max air permeability = 10.00</p>	Authorised SAP Assessor	Passed
Mechanical ventilation system Specific fan power (SFP)	Not applicable	Authorised SAP Assessor	
Have the key features of the design been included (or bettered) in practice?	<p>The following party walls have a U-value less than 0.2W/m<sup>2</sup>K:</p> <ul style="list-style-type: none"> <li>Party Walls (0.00)</li> </ul> <p>Use of the following low carbon or renewable technologies:</p> <ul style="list-style-type: none"> <li>Photovoltaic array</li> </ul>	Authorised SAP Assessor	

# Predicted Energy Assessment

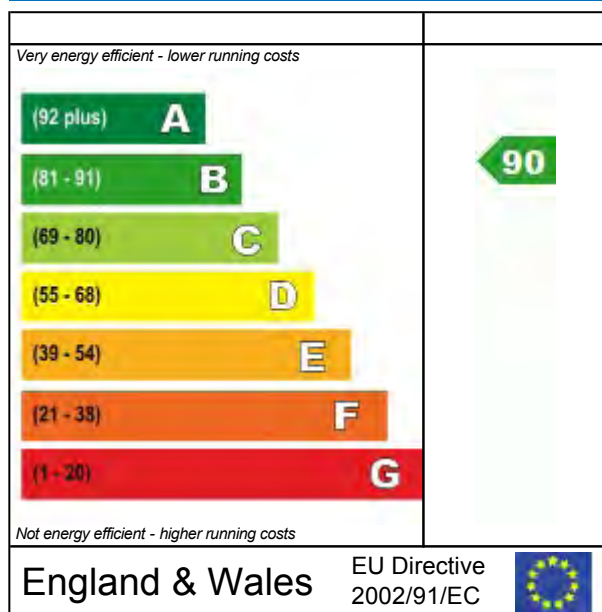
Flat 9  
399 High Road  
London  
N17 6QN

Dwelling type: Mid floor flat  
Date of assessment: 11-Jan-2015  
Produced by: Mr Damian Selim  
Total floor area: 82 m<sup>2</sup>

This is a Predicted Energy Assessment for a property which is not yet complete. It includes a predicted energy rating which might not represent the final energy rating of the property on completion. Once the property is completed, an Energy Performance Certificate is required providing information about the energy performance of the completed property.

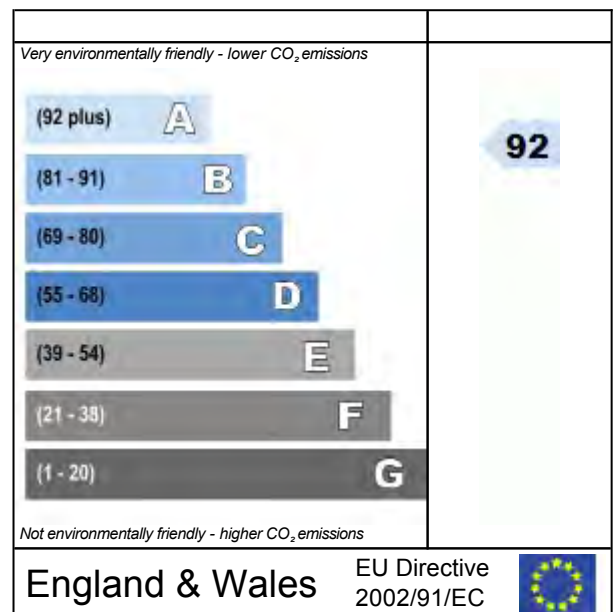
Energy performance has been assessed using the SAP 2009 methodology and is rated in terms of the energy use per square metre of floor area, energy efficiency based on fuel costs and environmental impact based on carbon dioxide (CO<sub>2</sub>) emissions.

## Energy Efficiency Rating



The energy efficiency rating is a measure of the overall efficiency of a home. The higher the rating the more energy efficient the home is and the lower the fuel bills are likely to be.

## Environmental Impact (CO<sub>2</sub>) Rating



The environmental impact rating is a measure of a home's impact on the environment in terms of carbon dioxide (CO<sub>2</sub>) emissions. The higher the rating, the less impact it has on the environment.

# Predicted Energy Assessment

This design final submission provides evidence towards compliance with Part L of the Building Regulations, in accordance with Appendix C of AD L1A. It has been carried out by an On-Construction Domestic Energy Assessor and can be accepted for Building Control purposes without further checking. It has been prepared from plans and specifications and may not reflect the 'as built' property. This report covers only items included within the SAP and is not a complete report of regulations compliance.

Assessor name	Mr Damian Selim	Assessor number	3824
Client		Last modified	11/01/2015
Address	Flat 10 399 High Road, London, N17 6QN		

Check	Evidence	Produced by	OK?																		
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target																					
TER (kg CO <sub>2</sub> /m <sup>2</sup> .a)	Fuel = N/A Fuel factor = 1.00 TER = 23.86	Authorised SAP Assessor																			
DER for dwelling as designed (kg CO <sub>2</sub> /m <sup>2</sup> .a)	DER = 13.47	Authorised SAP Assessor																			
Are emissions from dwelling as designed less than or equal to the target?	DER 13.47 < TER 23.86	Authorised SAP Assessor	Passed																		
Is the fabric energy efficiency of the dwelling as designed less than or equal to the target?	DFEE 60.24 < TFEE 71.23	Authorised SAP Assessor	Passed																		
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits																					
Fabric U-values																					
Are all U-values better than the design limits in Table 2?	<table><tr><th>Element</th><th colspan="2">Weighted average Highest</th></tr><tr><td>Wall</td><td>0.24 (max 0.30)</td><td>0.24 (max 0.70)</td></tr><tr><td>Party wall</td><td>0.00 (max 0.20)</td><td>N/A</td></tr><tr><td>Floor</td><td>0.09 (max 0.25)</td><td>0.09 (max 0.70)</td></tr><tr><td>Roof</td><td>0.15 (max 0.20)</td><td>0.15 (max 0.35)</td></tr><tr><td>Openings</td><td>1.55 (max 2.00)</td><td>1.80 (max 3.30)</td></tr></table>	Element	Weighted average Highest		Wall	0.24 (max 0.30)	0.24 (max 0.70)	Party wall	0.00 (max 0.20)	N/A	Floor	0.09 (max 0.25)	0.09 (max 0.70)	Roof	0.15 (max 0.20)	0.15 (max 0.35)	Openings	1.55 (max 2.00)	1.80 (max 3.30)	Authorised SAP Assessor	Passed
Element	Weighted average Highest																				
Wall	0.24 (max 0.30)	0.24 (max 0.70)																			
Party wall	0.00 (max 0.20)	N/A																			
Floor	0.09 (max 0.25)	0.09 (max 0.70)																			
Roof	0.15 (max 0.20)	0.15 (max 0.35)																			
Openings	1.55 (max 2.00)	1.80 (max 3.30)																			
Thermal bridging																					
How has the loss from thermal bridges been calculated?	Thermal bridging calculated from linear thermal transmittances for each junction	Authorised SAP Assessor																			
Heating and hot water systems																					
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Main heating system: Mains gas, Combi boiler Boiler Data from manufacturer Efficiency = 89.00% 2009 SEDBUK Minimum = 88.00%  Secondary heating system: None	Authorised SAP Assessor	Passed																		
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	No hot water cylinder	Authorised SAP Assessor																			
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Time and temperature zone control - plumbing circuit  Hot water control: No hot water cylinder Boiler interlock (main system 1)	Authorised SAP Assessor	Passed																		

Check	Evidence	Produced by	OK?
<b>Fixed internal lighting</b>			
Does fixed internal lighting comply with paragraphs 42 to 44?	<p>Schedule of installed fixed internal lighting</p> <p>Standard lights = 0</p> <p>Low energy lights = 10</p> <p>Percentage of low energy lights = 100%</p> <p>Minimum = 75 %</p>	Authorised SAP Assessor	Passed
<b>Criterion 3: the dwelling has appropriate passive control measures to limit solar gains</b>			
Does the dwelling have a strong tendency to high summertime temperatures?	<p>Overheating risk (June) = Not significant</p> <p>Overheating risk (July) = Slight</p> <p>Overheating risk (August) = Slight</p> <p>Region = Thames</p> <p>Thermal mass parameter = 250.00</p> <p>Ventilation rate in hot weather = 4.00 ach</p> <p>Blinds/curtains = None</p>	Authorised SAP Assessor	Passed
<b>Criterion 4: the performance of the dwelling, as designed, is consistent with the DER</b>			
Design air permeability (m <sup>3</sup> /(h.m <sup>2</sup> ) at 50Pa)	<p>Design air permeability = 4.00</p> <p>Max air permeability = 10.00</p>	Authorised SAP Assessor	Passed
Mechanical ventilation system Specific fan power (SFP)	Not applicable	Authorised SAP Assessor	
Have the key features of the design been included (or bettered) in practice?	<p>The following party walls have a U-value less than 0.2W/m<sup>2</sup>K:</p> <ul style="list-style-type: none"> <li>• Party Walls (0.00)</li> </ul> <p>The following floors have a U-value less than 0.13W/m<sup>2</sup>K:</p> <ul style="list-style-type: none"> <li>• Over Commercial (0.09)</li> </ul> <p>Use of the following low carbon or renewable technologies:</p> <ul style="list-style-type: none"> <li>• Photovoltaic array</li> </ul>	Authorised SAP Assessor	



# Predicted Energy Assessment

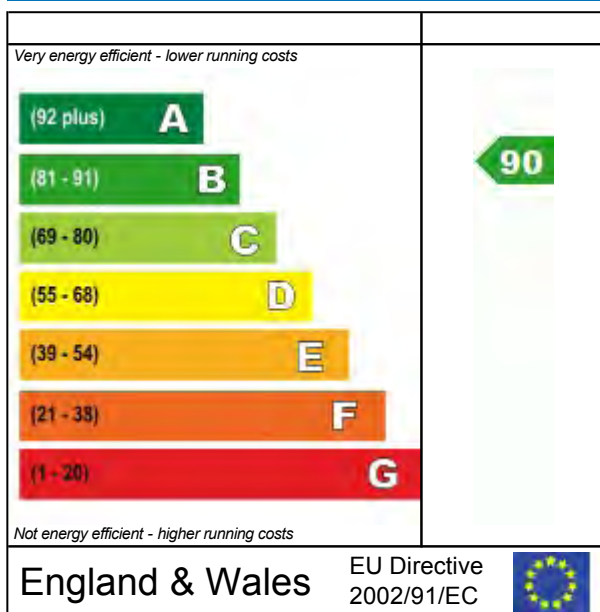
Flat 10  
399 High Road  
London  
N17 6QN

Dwelling type: Mid floor flat  
Date of assessment: 11-Jan-2015  
Produced by: Mr Damian Selim  
Total floor area: 55 m<sup>2</sup>

This is a Predicted Energy Assessment for a property which is not yet complete. It includes a predicted energy rating which might not represent the final energy rating of the property on completion. Once the property is completed, an Energy Performance Certificate is required providing information about the energy performance of the completed property.

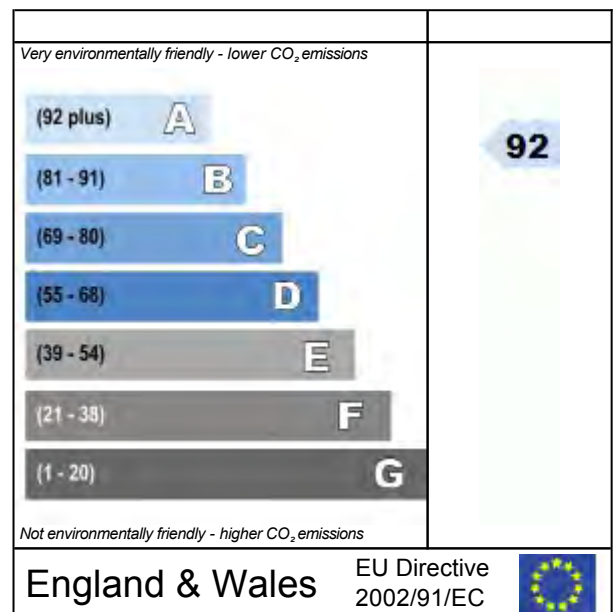
Energy performance has been assessed using the SAP 2009 methodology and is rated in terms of the energy use per square metre of floor area, energy efficiency based on fuel costs and environmental impact based on carbon dioxide (CO<sub>2</sub>) emissions.

## Energy Efficiency Rating



The energy efficiency rating is a measure of the overall efficiency of a home. The higher the rating the more energy efficient the home is and the lower the fuel bills are likely to be.

## Environmental Impact (CO<sub>2</sub>) Rating



The environmental impact rating is a measure of a home's impact on the environment in terms of carbon dioxide (CO<sub>2</sub>) emissions. The higher the rating, the less impact it has on the environment.

# Predicted Energy Assessment

This design final submission provides evidence towards compliance with Part L of the Building Regulations, in accordance with Appendix C of AD L1A. It has been carried out by an On-Construction Domestic Energy Assessor and can be accepted for Building Control purposes without further checking. It has been prepared from plans and specifications and may not reflect the 'as built' property. This report covers only items included within the SAP and is not a complete report of regulations compliance.

Assessor name	Mr Damian Selim	Assessor number	3824
Client		Last modified	11/01/2015
Address	Flat 11 399 High Road, London, N17 6QN		

Check	Evidence	Produced by	OK?																		
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target																					
TER (kg CO <sub>2</sub> /m <sup>2</sup> .a)	Fuel = N/A Fuel factor = 1.00 TER = 16.83	Authorised SAP Assessor																			
DER for dwelling as designed (kg CO <sub>2</sub> /m <sup>2</sup> .a)	DER = 11.30	Authorised SAP Assessor																			
Are emissions from dwelling as designed less than or equal to the target?	DER 11.30 < TER 16.83	Authorised SAP Assessor	Passed																		
Is the fabric energy efficiency of the dwelling as designed less than or equal to the target?	DFEE 43.77 < TFEE 49.66	Authorised SAP Assessor	Passed																		
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits																					
Fabric U-values																					
Are all U-values better than the design limits in Table 2?	<table><tr><th>Element</th><th colspan="2">Weighted average Highest</th></tr><tr><td>Wall</td><td>0.24 (max 0.30)</td><td>0.24 (max 0.70)</td></tr><tr><td>Party wall</td><td>0.00 (max 0.20)</td><td>N/A</td></tr><tr><td>Floor</td><td colspan="2">(no floor)</td></tr><tr><td>Roof</td><td>0.15 (max 0.20)</td><td>0.15 (max 0.35)</td></tr><tr><td>Openings</td><td>1.53 (max 2.00)</td><td>1.80 (max 3.30)</td></tr></table>	Element	Weighted average Highest		Wall	0.24 (max 0.30)	0.24 (max 0.70)	Party wall	0.00 (max 0.20)	N/A	Floor	(no floor)		Roof	0.15 (max 0.20)	0.15 (max 0.35)	Openings	1.53 (max 2.00)	1.80 (max 3.30)	Authorised SAP Assessor	Passed
Element	Weighted average Highest																				
Wall	0.24 (max 0.30)	0.24 (max 0.70)																			
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Roof	0.15 (max 0.20)	0.15 (max 0.35)																			
Openings	1.53 (max 2.00)	1.80 (max 3.30)																			
Thermal bridging																					
How has the loss from thermal bridges been calculated?	Thermal bridging calculated from linear thermal transmittances for each junction	Authorised SAP Assessor																			
Heating and hot water systems																					
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Main heating system: Mains gas, Combi boiler Boiler Data from manufacturer Efficiency = 89.00% 2009 SEDBUK Minimum = 88.00%  Secondary heating system: None	Authorised SAP Assessor	Passed																		
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	No hot water cylinder	Authorised SAP Assessor																			
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Time and temperature zone control - plumbing circuit  Hot water control: No hot water cylinder Boiler interlock (main system 1)	Authorised SAP Assessor	Passed																		

Check	Evidence	Produced by	OK?
<b>Fixed internal lighting</b>			
Does fixed internal lighting comply with paragraphs 42 to 44?	<p>Schedule of installed fixed internal lighting</p> <p>Standard lights = 0</p> <p>Low energy lights = 10</p> <p>Percentage of low energy lights = 100%</p> <p>Minimum = 75 %</p>	Authorised SAP Assessor	Passed
<b>Criterion 3: the dwelling has appropriate passive control measures to limit solar gains</b>			
Does the dwelling have a strong tendency to high summertime temperatures?	<p>Overheating risk (June) = Not significant</p> <p>Overheating risk (July) = Slight</p> <p>Overheating risk (August) = Slight</p> <p>Region = Thames</p> <p>Thermal mass parameter = 250.00</p> <p>Ventilation rate in hot weather = 4.00 ach</p> <p>Blinds/curtains = None</p>	Authorised SAP Assessor	Passed
<b>Criterion 4: the performance of the dwelling, as designed, is consistent with the DER</b>			
Design air permeability (m <sup>3</sup> /(h.m <sup>2</sup> ) at 50Pa)	<p>Design air permeability = 4.00</p> <p>Max air permeability = 10.00</p>	Authorised SAP Assessor	Passed
Mechanical ventilation system Specific fan power (SFP)	Not applicable	Authorised SAP Assessor	
Have the key features of the design been included (or bettered) in practice?	<p>The following party walls have a U-value less than 0.2W/m<sup>2</sup>K:</p> <ul style="list-style-type: none"> <li>Party Walls (0.00)</li> </ul> <p>Use of the following low carbon or renewable technologies:</p> <ul style="list-style-type: none"> <li>Photovoltaic array</li> </ul>	Authorised SAP Assessor	

# Predicted Energy Assessment

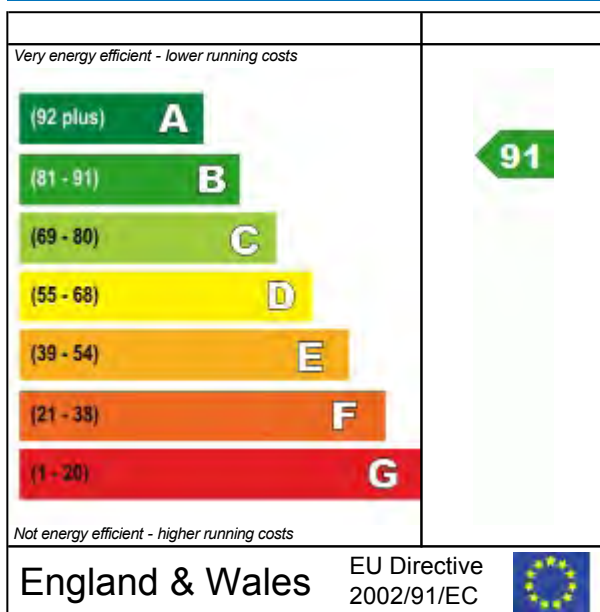
Flat 11  
399 High Road  
London  
N17 6QN

Dwelling type: Mid floor flat  
Date of assessment: 11-Jan-2015  
Produced by: Mr Damian Selim  
Total floor area: 96 m<sup>2</sup>

This is a Predicted Energy Assessment for a property which is not yet complete. It includes a predicted energy rating which might not represent the final energy rating of the property on completion. Once the property is completed, an Energy Performance Certificate is required providing information about the energy performance of the completed property.

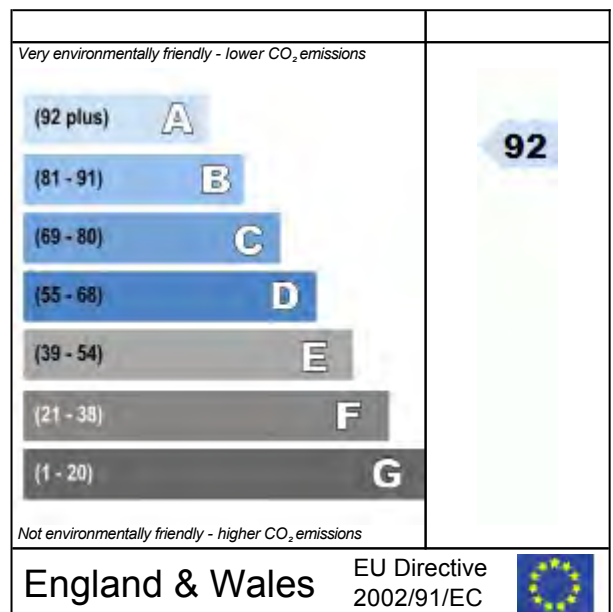
Energy performance has been assessed using the SAP 2009 methodology and is rated in terms of the energy use per square metre of floor area, energy efficiency based on fuel costs and environmental impact based on carbon dioxide (CO<sub>2</sub>) emissions.

## Energy Efficiency Rating



The energy efficiency rating is a measure of the overall efficiency of a home. The higher the rating the more energy efficient the home is and the lower the fuel bills are likely to be.

## Environmental Impact (CO<sub>2</sub>) Rating



The environmental impact rating is a measure of a home's impact on the environment in terms of carbon dioxide (CO<sub>2</sub>) emissions. The higher the rating, the less impact it has on the environment.

# Predicted Energy Assessment

# Predicted Energy Assessment

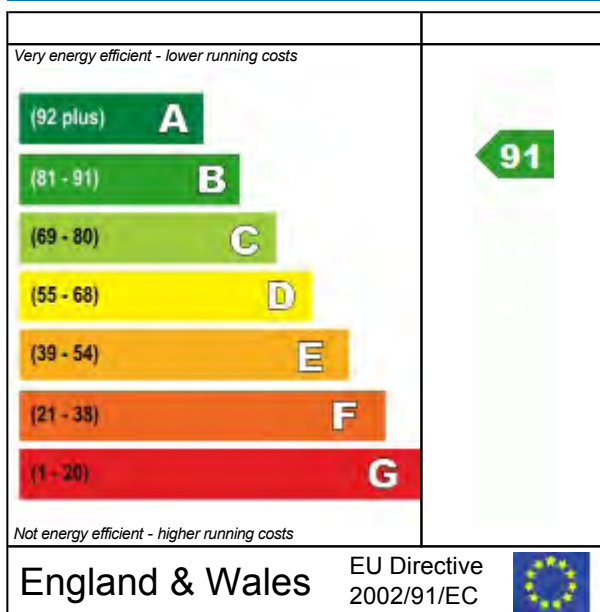
Flat 12  
399 High Road  
London  
N17 6QN

Dwelling type: Mid floor flat  
Date of assessment: 11-Jan-2015  
Produced by: Mr Damian Selim  
Total floor area: 70 m<sup>2</sup>

This is a Predicted Energy Assessment for a property which is not yet complete. It includes a predicted energy rating which might not represent the final energy rating of the property on completion. Once the property is completed, an Energy Performance Certificate is required providing information about the energy performance of the completed property.

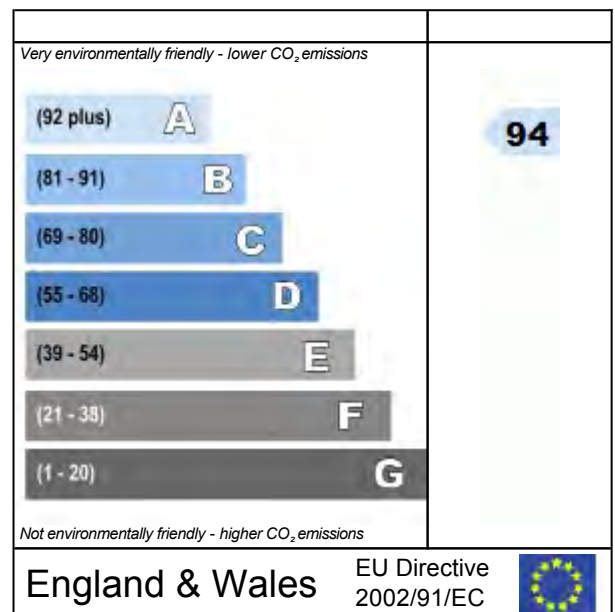
Energy performance has been assessed using the SAP 2009 methodology and is rated in terms of the energy use per square metre of floor area, energy efficiency based on fuel costs and environmental impact based on carbon dioxide (CO<sub>2</sub>) emissions.

## Energy Efficiency Rating



The energy efficiency rating is a measure of the overall efficiency of a home. The higher the rating the more energy efficient the home is and the lower the fuel bills are likely to be.

## Environmental Impact (CO<sub>2</sub>) Rating



The environmental impact rating is a measure of a home's impact on the environment in terms of carbon dioxide (CO<sub>2</sub>) emissions. The higher the rating, the less impact it has on the environment.

# Predicted Energy Assessment



This design final submission provides evidence towards compliance with Part L of the Building Regulations, in accordance with Appendix C of AD L1A. It has been carried out by an On-Construction Domestic Energy Assessor and can be accepted for Building Control purposes without further checking. It has been prepared from plans and specifications and may not reflect the 'as built' property. This report covers only items included within the SAP and is not a complete report of regulations compliance.

Assessor name	Mr Damian Selim	Assessor number	3824
Client		Last modified	11/01/2015
Address	Flat 13 399 High Road, London, N17 6QN		

Check	Evidence	Produced by	OK?																		
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target																					
TER (kg CO <sub>2</sub> /m <sup>2</sup> .a)	Fuel = N/A Fuel factor = 1.00 TER = 20.13	Authorised SAP Assessor																			
DER for dwelling as designed (kg CO <sub>2</sub> /m <sup>2</sup> .a)	DER = 13.04	Authorised SAP Assessor																			
Are emissions from dwelling as designed less than or equal to the target?	DER 13.04 < TER 20.13	Authorised SAP Assessor	Passed																		
Is the fabric energy efficiency of the dwelling as designed less than or equal to the target?	DFEE 50.74 < TFEE 57.69	Authorised SAP Assessor	Passed																		
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits																					
Fabric U-values																					
Are all U-values better than the design limits in Table 2?	<table><tr><th>Element</th><th colspan="2">Weighted average Highest</th></tr><tr><td>Wall</td><td>0.24 (max 0.30)</td><td>0.24 (max 0.70)</td></tr><tr><td>Party wall</td><td>0.00 (max 0.20)</td><td>N/A</td></tr><tr><td>Floor</td><td colspan="2">(no floor)</td></tr><tr><td>Roof</td><td>0.15 (max 0.20)</td><td>0.15 (max 0.35)</td></tr><tr><td>Openings</td><td>1.56 (max 2.00)</td><td>1.80 (max 3.30)</td></tr></table>	Element	Weighted average Highest		Wall	0.24 (max 0.30)	0.24 (max 0.70)	Party wall	0.00 (max 0.20)	N/A	Floor	(no floor)		Roof	0.15 (max 0.20)	0.15 (max 0.35)	Openings	1.56 (max 2.00)	1.80 (max 3.30)	Authorised SAP Assessor	Passed
Element	Weighted average Highest																				
Wall	0.24 (max 0.30)	0.24 (max 0.70)																			
Party wall	0.00 (max 0.20)	N/A																			
Floor	(no floor)																				
Roof	0.15 (max 0.20)	0.15 (max 0.35)																			
Openings	1.56 (max 2.00)	1.80 (max 3.30)																			
Thermal bridging																					
How has the loss from thermal bridges been calculated?	Thermal bridging calculated from linear thermal transmittances for each junction	Authorised SAP Assessor																			
Heating and hot water systems																					
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Main heating system: Mains gas, Combi boiler Boiler Data from manufacturer Efficiency = 89.00% 2009 SEDBUK Minimum = 88.00%  Secondary heating system: None	Authorised SAP Assessor	Passed																		
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	No hot water cylinder	Authorised SAP Assessor																			
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Time and temperature zone control - plumbing circuit  Hot water control: No hot water cylinder Boiler interlock (main system 1)	Authorised SAP Assessor	Passed																		

Check	Evidence	Produced by	OK?
<b>Fixed internal lighting</b>			
Does fixed internal lighting comply with paragraphs 42 to 44?	<p>Schedule of installed fixed internal lighting</p> <p>Standard lights = 0</p> <p>Low energy lights = 10</p> <p>Percentage of low energy lights = 100%</p> <p>Minimum = 75 %</p>	Authorised SAP Assessor	Passed
<b>Criterion 3: the dwelling has appropriate passive control measures to limit solar gains</b>			
Does the dwelling have a strong tendency to high summertime temperatures?	<p>Overheating risk (June) = Not significant</p> <p>Overheating risk (July) = Not significant</p> <p>Overheating risk (August) = Not significant</p> <p>Region = Thames</p> <p>Thermal mass parameter = 250.00</p> <p>Ventilation rate in hot weather = 4.00 ach</p> <p>Blinds/curtains = None</p>	Authorised SAP Assessor	Passed
<b>Criterion 4: the performance of the dwelling, as designed, is consistent with the DER</b>			
Design air permeability (m <sup>3</sup> /(h.m <sup>2</sup> ) at 50Pa)	<p>Design air permeability = 4.00</p> <p>Max air permeability = 10.00</p>	Authorised SAP Assessor	Passed
Mechanical ventilation system Specific fan power (SFP)	Not applicable	Authorised SAP Assessor	
Have the key features of the design been included (or bettered) in practice?	<p>The following party walls have a U-value less than 0.2W/m<sup>2</sup>K:</p> <ul style="list-style-type: none"> <li>Party Walls (0.00)</li> </ul> <p>Use of the following low carbon or renewable technologies:</p> <ul style="list-style-type: none"> <li>Photovoltaic array</li> </ul>	Authorised SAP Assessor	

# Predicted Energy Assessment

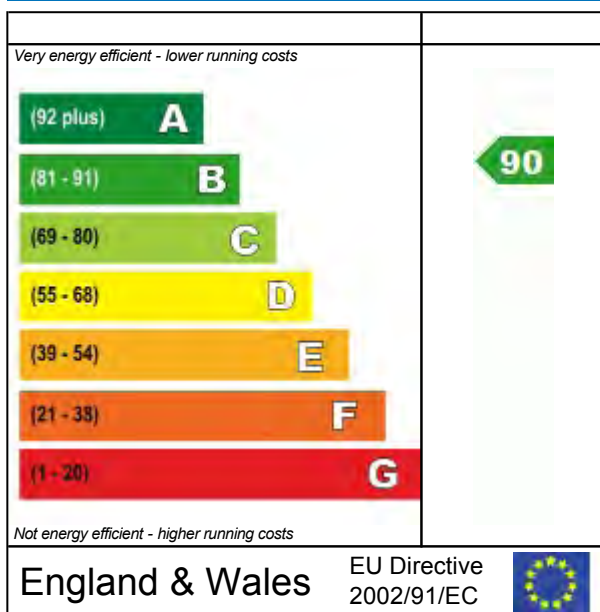
Flat 13  
399 High Road  
London  
N17 6QN

Dwelling type: Mid floor flat  
Date of assessment: 11-Jan-2015  
Produced by: Mr Damian Selim  
Total floor area: 78 m<sup>2</sup>

This is a Predicted Energy Assessment for a property which is not yet complete. It includes a predicted energy rating which might not represent the final energy rating of the property on completion. Once the property is completed, an Energy Performance Certificate is required providing information about the energy performance of the completed property.

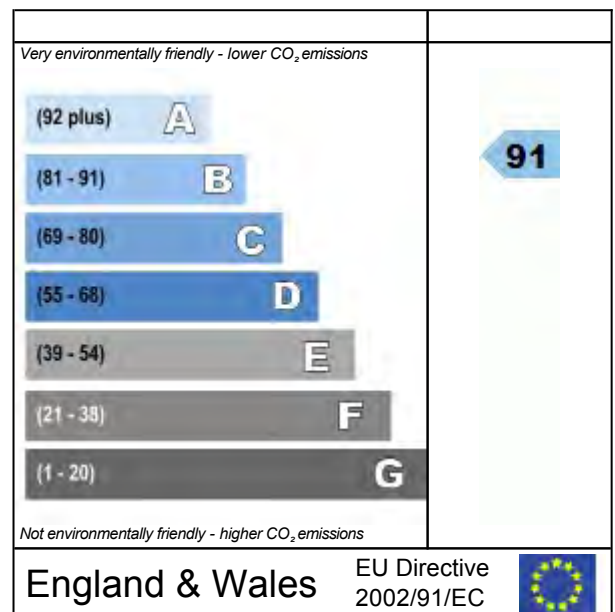
Energy performance has been assessed using the SAP 2009 methodology and is rated in terms of the energy use per square metre of floor area, energy efficiency based on fuel costs and environmental impact based on carbon dioxide (CO<sub>2</sub>) emissions.

## Energy Efficiency Rating



The energy efficiency rating is a measure of the overall efficiency of a home. The higher the rating the more energy efficient the home is and the lower the fuel bills are likely to be.

## Environmental Impact (CO<sub>2</sub>) Rating



The environmental impact rating is a measure of a home's impact on the environment in terms of carbon dioxide (CO<sub>2</sub>) emissions. The higher the rating, the less impact it has on the environment.

# Predicted Energy Assessment

This design final submission provides evidence towards compliance with Part L of the Building Regulations, in accordance with Appendix C of AD L1A. It has been carried out by an On-Construction Domestic Energy Assessor and can be accepted for Building Control purposes without further checking. It has been prepared from plans and specifications and may not reflect the 'as built' property. This report covers only items included within the SAP and is not a complete report of regulations compliance.

Assessor name	Mr Damian Selim	Assessor number	3824
Client		Last modified	11/01/2015
Address	Flat 14 399 High Road, London, N17 6QN		

Check	Evidence	Produced by	OK?																		
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target																					
TER (kg CO <sub>2</sub> /m <sup>2</sup> .a)	Fuel = N/A Fuel factor = 1.00 TER = 20.39	Authorised SAP Assessor																			
DER for dwelling as designed (kg CO <sub>2</sub> /m <sup>2</sup> .a)	DER = 13.29	Authorised SAP Assessor																			
Are emissions from dwelling as designed less than or equal to the target?	DER 13.29 < TER 20.39	Authorised SAP Assessor	Passed																		
Is the fabric energy efficiency of the dwelling as designed less than or equal to the target?	DFEE 52.67 < TFEE 61.07	Authorised SAP Assessor	Passed																		
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits																					
Fabric U-values																					
Are all U-values better than the design limits in Table 2?	<table><tr><th>Element</th><th colspan="2">Weighted average Highest</th></tr><tr><td>Wall</td><td>0.24 (max 0.30)</td><td>0.24 (max 0.70)</td></tr><tr><td>Party wall</td><td>0.00 (max 0.20)</td><td>N/A</td></tr><tr><td>Floor</td><td colspan="2">(no floor)</td></tr><tr><td>Roof</td><td>0.15 (max 0.20)</td><td>0.15 (max 0.35)</td></tr><tr><td>Openings</td><td>1.54 (max 2.00)</td><td>1.80 (max 3.30)</td></tr></table>	Element	Weighted average Highest		Wall	0.24 (max 0.30)	0.24 (max 0.70)	Party wall	0.00 (max 0.20)	N/A	Floor	(no floor)		Roof	0.15 (max 0.20)	0.15 (max 0.35)	Openings	1.54 (max 2.00)	1.80 (max 3.30)	Authorised SAP Assessor	Passed
Element	Weighted average Highest																				
Wall	0.24 (max 0.30)	0.24 (max 0.70)																			
Party wall	0.00 (max 0.20)	N/A																			
Floor	(no floor)																				
Roof	0.15 (max 0.20)	0.15 (max 0.35)																			
Openings	1.54 (max 2.00)	1.80 (max 3.30)																			
Thermal bridging																					
How has the loss from thermal bridges been calculated?	Thermal bridging calculated from linear thermal transmittances for each junction	Authorised SAP Assessor																			
Heating and hot water systems																					
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Main heating system: Mains gas, Combi boiler Boiler Data from manufacturer Efficiency = 89.00% 2009 SEDBUK Minimum = 88.00%  Secondary heating system: None	Authorised SAP Assessor	Passed																		
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	No hot water cylinder	Authorised SAP Assessor																			
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Time and temperature zone control - plumbing circuit  Hot water control: No hot water cylinder Boiler interlock (main system 1)	Authorised SAP Assessor	Passed																		

Check	Evidence	Produced by	OK?
<b>Fixed internal lighting</b>			
Does fixed internal lighting comply with paragraphs 42 to 44?	<p>Schedule of installed fixed internal lighting</p> <p>Standard lights = 0</p> <p>Low energy lights = 10</p> <p>Percentage of low energy lights = 100%</p> <p>Minimum = 75 %</p>	Authorised SAP Assessor	Passed
<b>Criterion 3: the dwelling has appropriate passive control measures to limit solar gains</b>			
Does the dwelling have a strong tendency to high summertime temperatures?	<p>Overheating risk (June) = Not significant</p> <p>Overheating risk (July) = Slight</p> <p>Overheating risk (August) = Slight</p> <p>Region = Thames</p> <p>Thermal mass parameter = 250.00</p> <p>Ventilation rate in hot weather = 4.00 ach</p> <p>Blinds/curtains = None</p>	Authorised SAP Assessor	Passed
<b>Criterion 4: the performance of the dwelling, as designed, is consistent with the DER</b>			
Design air permeability (m <sup>3</sup> /(h.m <sup>2</sup> ) at 50Pa)	<p>Design air permeability = 4.00</p> <p>Max air permeability = 10.00</p>	Authorised SAP Assessor	Passed
Mechanical ventilation system Specific fan power (SFP)	Not applicable	Authorised SAP Assessor	
Have the key features of the design been included (or bettered) in practice?	<p>The following party walls have a U-value less than 0.2W/m<sup>2</sup>K:</p> <ul style="list-style-type: none"> <li>Party Walls (0.00)</li> </ul> <p>Use of the following low carbon or renewable technologies:</p> <ul style="list-style-type: none"> <li>Photovoltaic array</li> </ul>	Authorised SAP Assessor	



# Predicted Energy Assessment

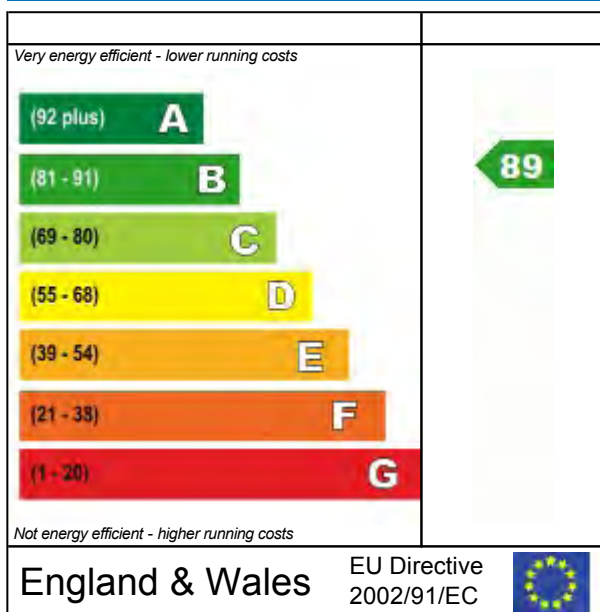
Flat 14  
399 High Road  
London  
N17 6QN

Dwelling type: Top floor flat  
Date of assessment: 11-Jan-2015  
Produced by: Mr Damian Selim  
Total floor area: 78 m<sup>2</sup>

This is a Predicted Energy Assessment for a property which is not yet complete. It includes a predicted energy rating which might not represent the final energy rating of the property on completion. Once the property is completed, an Energy Performance Certificate is required providing information about the energy performance of the completed property.

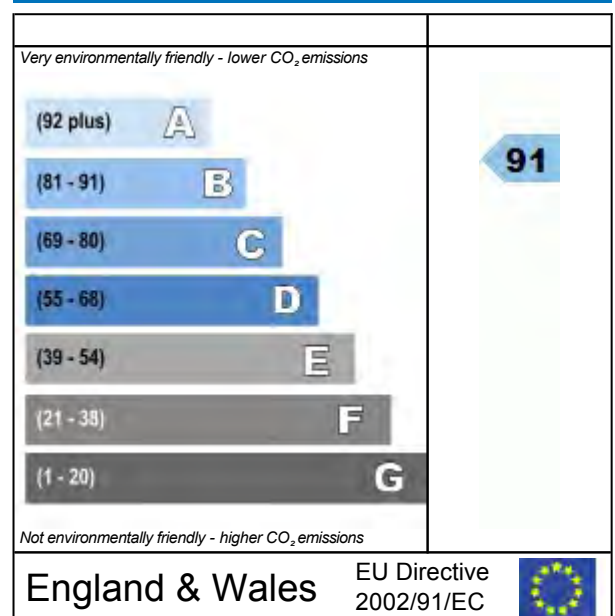
Energy performance has been assessed using the SAP 2009 methodology and is rated in terms of the energy use per square metre of floor area, energy efficiency based on fuel costs and environmental impact based on carbon dioxide (CO<sub>2</sub>) emissions.

## Energy Efficiency Rating



The energy efficiency rating is a measure of the overall efficiency of a home. The higher the rating the more energy efficient the home is and the lower the fuel bills are likely to be.

## Environmental Impact (CO<sub>2</sub>) Rating



The environmental impact rating is a measure of a home's impact on the environment in terms of carbon dioxide (CO<sub>2</sub>) emissions. The higher the rating, the less impact it has on the environment.

# Predicted Energy Assessment

This design final submission provides evidence towards compliance with Part L of the Building Regulations, in accordance with Appendix C of AD L1A. It has been carried out by an On-Construction Domestic Energy Assessor and can be accepted for Building Control purposes without further checking. It has been prepared from plans and specifications and may not reflect the 'as built' property. This report covers only items included within the SAP and is not a complete report of regulations compliance.

Assessor name	Mr Damian Selim	Assessor number	3824
Client		Last modified	11/01/2015
Address	Flat 15 399 High Road, London, N17 6QN		

Check	Evidence	Produced by	OK?																		
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target																					
TER (kg CO <sub>2</sub> /m <sup>2</sup> .a)	Fuel = N/A Fuel factor = 1.00 TER = 20.96	Authorised SAP Assessor																			
DER for dwelling as designed (kg CO <sub>2</sub> /m <sup>2</sup> .a)	DER = 13.41	Authorised SAP Assessor																			
Are emissions from dwelling as designed less than or equal to the target?	DER 13.41 < TER 20.96	Authorised SAP Assessor	Passed																		
Is the fabric energy efficiency of the dwelling as designed less than or equal to the target?	DFEE 53.46 < TFEE 61.91	Authorised SAP Assessor	Passed																		
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits																					
Fabric U-values																					
Are all U-values better than the design limits in Table 2?	<table><tr><th>Element</th><th colspan="2">Weighted average Highest</th></tr><tr><td>Wall</td><td>0.24 (max 0.30)</td><td>0.24 (max 0.70)</td></tr><tr><td>Party wall</td><td>0.00 (max 0.20)</td><td>N/A</td></tr><tr><td>Floor</td><td colspan="2">(no floor)</td></tr><tr><td>Roof</td><td>0.15 (max 0.20)</td><td>0.15 (max 0.35)</td></tr><tr><td>Openings</td><td>1.55 (max 2.00)</td><td>1.80 (max 3.30)</td></tr></table>	Element	Weighted average Highest		Wall	0.24 (max 0.30)	0.24 (max 0.70)	Party wall	0.00 (max 0.20)	N/A	Floor	(no floor)		Roof	0.15 (max 0.20)	0.15 (max 0.35)	Openings	1.55 (max 2.00)	1.80 (max 3.30)	Authorised SAP Assessor	Passed
Element	Weighted average Highest																				
Wall	0.24 (max 0.30)	0.24 (max 0.70)																			
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Thermal bridging																					
How has the loss from thermal bridges been calculated?	Thermal bridging calculated from linear thermal transmittances for each junction	Authorised SAP Assessor																			
Heating and hot water systems																					
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Main heating system: Mains gas, Combi boiler Boiler Data from manufacturer Efficiency = 89.00% 2009 SEDBUK Minimum = 88.00%  Secondary heating system: None	Authorised SAP Assessor	Passed																		
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	No hot water cylinder	Authorised SAP Assessor																			
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Time and temperature zone control - plumbing circuit  Hot water control: No hot water cylinder Boiler interlock (main system 1)	Authorised SAP Assessor	Passed																		

Check	Evidence	Produced by	OK?
<b>Fixed internal lighting</b>			
Does fixed internal lighting comply with paragraphs 42 to 44?	<p>Schedule of installed fixed internal lighting</p> <p>Standard lights = 0</p> <p>Low energy lights = 10</p> <p>Percentage of low energy lights = 100%</p> <p>Minimum = 75 %</p>	Authorised SAP Assessor	Passed
<b>Criterion 3: the dwelling has appropriate passive control measures to limit solar gains</b>			
Does the dwelling have a strong tendency to high summertime temperatures?	<p>Overheating risk (June) = Not significant</p> <p>Overheating risk (July) = Slight</p> <p>Overheating risk (August) = Not significant</p> <p>Region = Thames</p> <p>Thermal mass parameter = 250.00</p> <p>Ventilation rate in hot weather = 4.00 ach</p> <p>Blinds/curtains = None</p>	Authorised SAP Assessor	Passed
<b>Criterion 4: the performance of the dwelling, as designed, is consistent with the DER</b>			
Design air permeability (m <sup>3</sup> /(h.m <sup>2</sup> ) at 50Pa)	<p>Design air permeability = 4.00</p> <p>Max air permeability = 10.00</p>	Authorised SAP Assessor	Passed
Mechanical ventilation system Specific fan power (SFP)	Not applicable	Authorised SAP Assessor	
Have the key features of the design been included (or bettered) in practice?	<p>The following party walls have a U-value less than 0.2W/m<sup>2</sup>K:</p> <ul style="list-style-type: none"> <li>• Party Walls (0.00)</li> </ul> <p>Use of the following low carbon or renewable technologies:</p> <ul style="list-style-type: none"> <li>• Photovoltaic array</li> </ul>	Authorised SAP Assessor	

# Predicted Energy Assessment

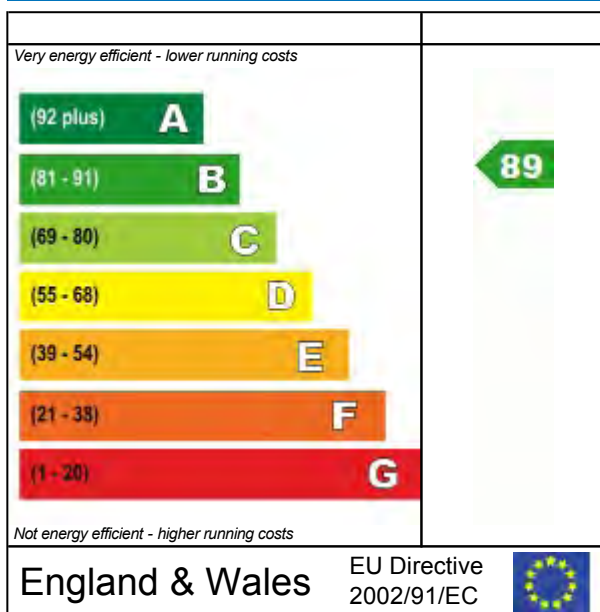
Flat 15  
399 High Road  
London  
N17 6QN

Dwelling type: Top floor flat  
Date of assessment: 11-Jan-2015  
Produced by: Mr Damian Selim  
Total floor area: 75 m<sup>2</sup>

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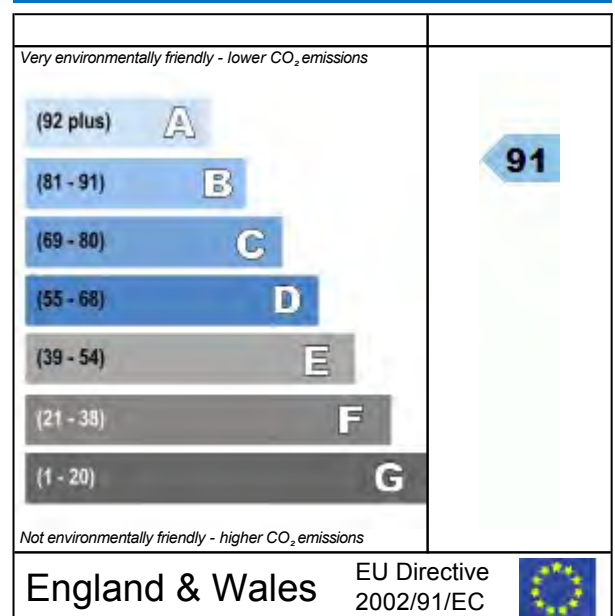
Energy performance has been assessed using the SAP 2009 methodology and is rated in terms of the energy use per square metre of floor area, energy efficiency based on fuel costs and environmental impact based on carbon dioxide (CO<sub>2</sub>) emissions.

## Energy Efficiency Rating



The energy efficiency rating is a measure of the overall efficiency of a home. The higher the rating the more energy efficient the home is and the lower the fuel bills are likely to be.

## Environmental Impact (CO<sub>2</sub>) Rating



The environmental impact rating is a measure of a home's impact on the environment in terms of carbon dioxide (CO<sub>2</sub>) emissions. The higher the rating, the less impact it has on the environment.

# Predicted Energy Assessment

This design final submission provides evidence towards compliance with Part L of the Building Regulations, in accordance with Appendix C of AD L1A. It has been carried out by an On-Construction Domestic Energy Assessor and can be accepted for Building Control purposes without further checking. It has been prepared from plans and specifications and may not reflect the 'as built' property. This report covers only items included within the SAP and is not a complete report of regulations compliance.

Assessor name	Mr Damian Selim	Assessor number	3824
Client		Last modified	11/01/2015
Address	Flat 16 399 High Road, London, N17 6QN		

Check	Evidence	Produced by	OK?
<b>Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target</b>			
TER (kg CO <sub>2</sub> /m <sup>2</sup> .a)	Fuel = N/A Fuel factor = 1.00 TER = 20.80	Authorised SAP Assessor	
DER for dwelling as designed (kg CO <sub>2</sub> /m <sup>2</sup> .a)	DER = 13.71	Authorised SAP Assessor	
Are emissions from dwelling as designed less than or equal to the target?	DER 13.71 < TER 20.80	Authorised SAP Assessor	Passed
Is the fabric energy efficiency of the dwelling as designed less than or equal to the target?	DFEE 53.09 < TFEE 63.54	Authorised SAP Assessor	Passed

### Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits

Fabric U-values					
Are all U-values better than the design limits in Table 2?	Element	Weighted average Highest		Authorised SAP Assessor	Passed
	Wall	0.24 (max 0.30)	0.24 (max 0.70)		
	Party wall	0.00 (max 0.20)	N/A		
	Floor	0.09 (max 0.25)	0.09 (max 0.70)		
	Roof	0.15 (max 0.20)	0.15 (max 0.35)		
	Openings	1.55 (max 2.00)	1.80 (max 3.30)		

<b>Thermal bridging</b>			
How has the loss from thermal bridges been calculated?	Thermal bridging calculated from linear thermal transmittances for each junction	Authorised SAP Assessor	

<b>Heating and hot water systems</b>			
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Main heating system: Mains gas, Combi boiler Boiler Data from manufacturer Efficiency = 89.00% 2009 SEDBUK Minimum = 88.00%  Secondary heating system: None	Authorised SAP Assessor	Passed
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	No hot water cylinder	Authorised SAP Assessor	
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Time and temperature zone control - plumbing circuit  Hot water control: No hot water cylinder Boiler interlock (main system 1)	Authorised SAP Assessor	Passed



Check	Evidence	Produced by	OK?
<b>Fixed internal lighting</b>			
Does fixed internal lighting comply with paragraphs 42 to 44?	<p>Schedule of installed fixed internal lighting</p> <p>Standard lights = 0</p> <p>Low energy lights = 10</p> <p>Percentage of low energy lights = 100%</p> <p>Minimum = 75 %</p>	Authorised SAP Assessor	Passed
<b>Criterion 3: the dwelling has appropriate passive control measures to limit solar gains</b>			
Does the dwelling have a strong tendency to high summertime temperatures?	<p>Overheating risk (June) = Not significant</p> <p>Overheating risk (July) = Slight</p> <p>Overheating risk (August) = Not significant</p> <p>Region = Thames</p> <p>Thermal mass parameter = 250.00</p> <p>Ventilation rate in hot weather = 4.00 ach</p> <p>Blinds/curtains = None</p>	Authorised SAP Assessor	Passed
<b>Criterion 4: the performance of the dwelling, as designed, is consistent with the DER</b>			
Design air permeability (m <sup>3</sup> /(h.m <sup>2</sup> ) at 50Pa)	<p>Design air permeability = 4.00</p> <p>Max air permeability = 10.00</p>	Authorised SAP Assessor	Passed
Mechanical ventilation system Specific fan power (SFP)	Not applicable	Authorised SAP Assessor	
Have the key features of the design been included (or bettered) in practice?	<p>The following party walls have a U-value less than 0.2W/m<sup>2</sup>K:</p> <ul style="list-style-type: none"> <li>• Party Walls (0.00)</li> </ul> <p>The following floors have a U-value less than 0.13W/m<sup>2</sup>K:</p> <ul style="list-style-type: none"> <li>• Over Comercial (0.09)</li> </ul> <p>Use of the following low carbon or renewable technologies:</p> <ul style="list-style-type: none"> <li>• Photovoltaic array</li> </ul>	Authorised SAP Assessor	

# Predicted Energy Assessment

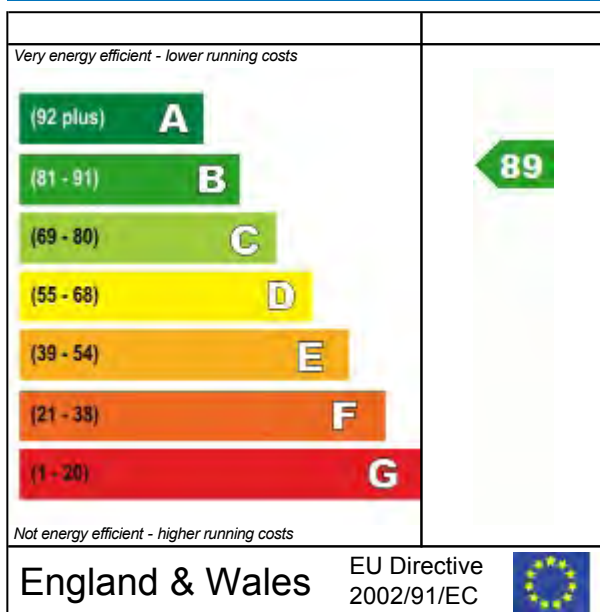
Flat 16  
399 High Road  
London  
N17 6QN

Dwelling type: Top floor flat  
Date of assessment: 11-Jan-2015  
Produced by: Mr Damian Selim  
Total floor area: 85 m<sup>2</sup>

This is a Predicted Energy Assessment for a property which is not yet complete. It includes a predicted energy rating which might not represent the final energy rating of the property on completion. Once the property is completed, an Energy Performance Certificate is required providing information about the energy performance of the completed property.

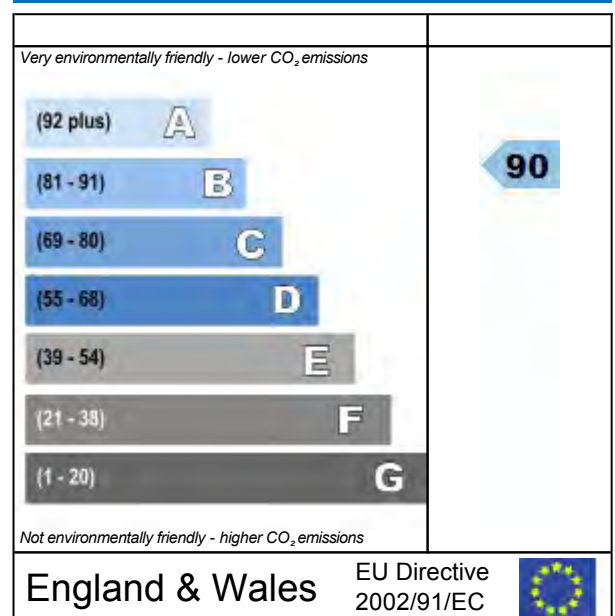
Energy performance has been assessed using the SAP 2009 methodology and is rated in terms of the energy use per square metre of floor area, energy efficiency based on fuel costs and environmental impact based on carbon dioxide (CO<sub>2</sub>) emissions.

## Energy Efficiency Rating



The energy efficiency rating is a measure of the overall efficiency of a home. The higher the rating the more energy efficient the home is and the lower the fuel bills are likely to be.

## Environmental Impact (CO<sub>2</sub>) Rating



The environmental impact rating is a measure of a home's impact on the environment in terms of carbon dioxide (CO<sub>2</sub>) emissions. The higher the rating, the less impact it has on the environment.

# Predicted Energy Assessment

This design final submission provides evidence towards compliance with Part L of the Building Regulations, in accordance with Appendix C of AD L1A. It has been carried out by an On-Construction Domestic Energy Assessor and can be accepted for Building Control purposes without further checking. It has been prepared from plans and specifications and may not reflect the 'as built' property. This report covers only items included within the SAP and is not a complete report of regulations compliance.

Assessor name	Mr Damian Selim	Assessor number	3824
Client		Last modified	11/01/2015
Address	Flat 17 399 High Road, London, N17 6QN		

Check	Evidence	Produced by	OK?																		
Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target																					
TER (kg CO <sub>2</sub> /m <sup>2</sup> .a)	Fuel = N/A Fuel factor = 1.00 TER = 23.92	Authorised SAP Assessor																			
DER for dwelling as designed (kg CO <sub>2</sub> /m <sup>2</sup> .a)	DER = 12.12	Authorised SAP Assessor																			
Are emissions from dwelling as designed less than or equal to the target?	DER 12.12 < TER 23.92	Authorised SAP Assessor	Passed																		
Is the fabric energy efficiency of the dwelling as designed less than or equal to the target?	DFEE 58.35 < TFEE 67.48	Authorised SAP Assessor	Passed																		
Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits																					
Fabric U-values																					
Are all U-values better than the design limits in Table 2?	<table><thead><tr><th>Element</th><th colspan="2">Weighted average Highest</th></tr></thead><tbody><tr><td>Wall</td><td>0.24 (max 0.30)</td><td>0.24 (max 0.70)</td></tr><tr><td>Party wall</td><td>0.00 (max 0.20)</td><td>N/A</td></tr><tr><td>Floor</td><td>0.09 (max 0.25)</td><td>0.09 (max 0.70)</td></tr><tr><td>Roof</td><td>0.15 (max 0.20)</td><td>0.15 (max 0.35)</td></tr><tr><td>Openings</td><td>1.55 (max 2.00)</td><td>1.80 (max 3.30)</td></tr></tbody></table>	Element	Weighted average Highest		Wall	0.24 (max 0.30)	0.24 (max 0.70)	Party wall	0.00 (max 0.20)	N/A	Floor	0.09 (max 0.25)	0.09 (max 0.70)	Roof	0.15 (max 0.20)	0.15 (max 0.35)	Openings	1.55 (max 2.00)	1.80 (max 3.30)	Authorised SAP Assessor	Passed
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Check	Evidence	Produced by	OK?
<b>Fixed internal lighting</b>			
Does fixed internal lighting comply with paragraphs 42 to 44?	<p>Schedule of installed fixed internal lighting</p> <p>Standard lights = 0</p> <p>Low energy lights = 10</p> <p>Percentage of low energy lights = 100%</p> <p>Minimum = 75 %</p>	Authorised SAP Assessor	Passed
<b>Criterion 3: the dwelling has appropriate passive control measures to limit solar gains</b>			
Does the dwelling have a strong tendency to high summertime temperatures?	<p>Overheating risk (June) = Not significant</p> <p>Overheating risk (July) = Slight</p> <p>Overheating risk (August) = Slight</p> <p>Region = Thames</p> <p>Thermal mass parameter = 250.00</p> <p>Ventilation rate in hot weather = 4.00 ach</p> <p>Blinds/curtains = None</p>	Authorised SAP Assessor	Passed
<b>Criterion 4: the performance of the dwelling, as designed, is consistent with the DER</b>			
Design air permeability (m <sup>3</sup> /(h.m <sup>2</sup> ) at 50Pa)	<p>Design air permeability = 4.00</p> <p>Max air permeability = 10.00</p>	Authorised SAP Assessor	Passed
Mechanical ventilation system Specific fan power (SFP)	Not applicable	Authorised SAP Assessor	
Have the key features of the design been included (or bettered) in practice?	<p>The following party walls have a U-value less than 0.2W/m<sup>2</sup>K:</p> <ul style="list-style-type: none"> <li>• Party Walls (0.00)</li> </ul> <p>The following floors have a U-value less than 0.13W/m<sup>2</sup>K:</p> <ul style="list-style-type: none"> <li>• Over Comercial (0.09)</li> </ul> <p>Use of the following low carbon or renewable technologies:</p> <ul style="list-style-type: none"> <li>• Photovoltaic array</li> </ul>	Authorised SAP Assessor	

# Predicted Energy Assessment

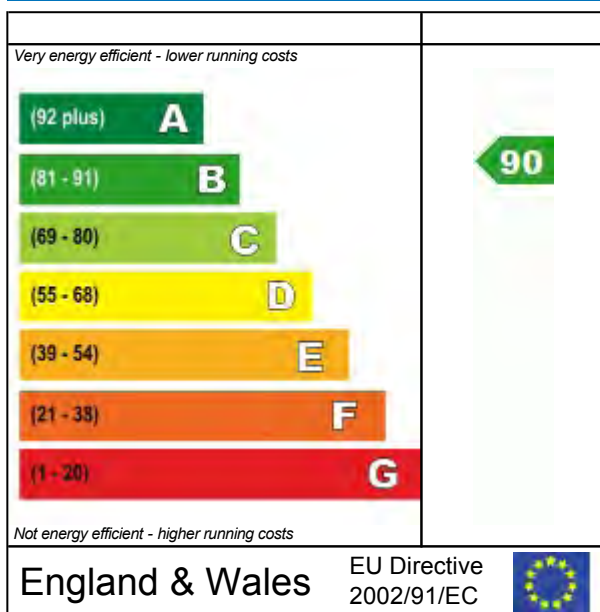
Flat 17  
399 High Road  
London  
N17 6QN

Dwelling type: Top floor flat  
Date of assessment: 11-Jan-2015  
Produced by: Mr Damian Selim  
Total floor area: 47 m<sup>2</sup>

This is a Predicted Energy Assessment for a property which is not yet complete. It includes a predicted energy rating which might not represent the final energy rating of the property on completion. Once the property is completed, an Energy Performance Certificate is required providing information about the energy performance of the completed property.

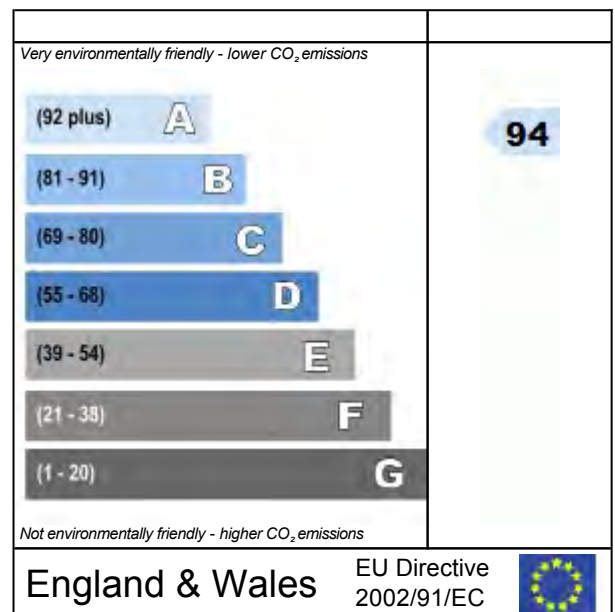
Energy performance has been assessed using the SAP 2009 methodology and is rated in terms of the energy use per square metre of floor area, energy efficiency based on fuel costs and environmental impact based on carbon dioxide (CO<sub>2</sub>) emissions.

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# Predicted Energy Assessment





FLOOD RISK ASSESSMENT  
(focus on residual surface water  
flood risk)

399  
Tottenham  
High Road,  
London,  
N17 6QN

16 December  
2014

Ref: 14-1187



## **New residential-led mixed use scheme in FZ1 Existing site is 100% impermeable**

- Located wholly in EA FZ1
- **REDUCE FLOOD RISK OVERALL:** increase in permeable areas on the site
- Site unlikely to flood; residual surface water flood risk
- Flood resilient measures can be incorporated
- Appropriate mitigation measures to encourage waters away from egress / access points and from entering the lower ground

At :

399 Tottenham High Road, London, N17 6QN  
16 December 2014

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*If this report has been released electronically, the appendices referred to herein can be found in the annexed zip folder/s as .pdf or .dwg files. If this report has been released in hard copy the appendices will be bound into the back of this report. Plans may be annexed separately as A1 or A0 copies where a bound-in A3 copy is not appropriate.*

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## 1.0 Scope

This report contains the details of a Flood Risk Assessment carried out by Ark Environmental Consulting Limited ("ARK Ltd") that has been appointed by Syntegra Consulting on behalf of Alto Property Investments Limited ("Client"), for 399 Tottenham High Road, London, N17 6QN, henceforth referred to as "the site" in this report.

This report has been prepared for Syntegra and must not be relied upon by any other party without the explicit written permission of ARK Ltd.

All parties to this report do not intend any of the terms of the Contracts (Right of Third Parties Act 1999) to apply to this report.

Please note this report does not purport to provide definitive legal advice nor can it be used to demonstrate that the site will never flood in the future.

The Executive Summary contains an overview of key findings and conclusions. However, no reliance should be placed on the Executive Summary until the whole of the report has been read.

Other sections of the report may contain information which puts into context the findings noted within the Executive Summary.

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## 2.0 Executive Summary

This FRA has been carried out in accordance with the 27th March 2012 National Planning Policy Framework (NPPF). It is to be used to assist the Local Planning Authority (LPA) and Environment Agency (EA) when considering the flooding issues of the proposed development as part of a planning application.

The proposed development is for a residential-led mixed use scheme with a new basement; bedrooms in the basement considered appropriate given residual flood hazard and access to upper levels.

This is categorized as a "More Vulnerable" in FZ1: in accordance with the NPPF classifications the NPPF Exception test does not need to be passed. The main source of flooding is potential surface water flooding.

There are no sources of flooding except residual surface water flooding as defined by the Richmond SFRA & PFRA.

Dry access to upper levels for the upper dwelling for the lifetime of the development is achievable and considered appropriate precautionary operation management.

Given the residual risk flood setting, the level, extent and depth of flooding on the site can be managed in terms of resilient measures and precautionary mitigation measures.

Based on the likely flooding risk and small scale of the proposed development, it is considered that the proposed development can be constructed and continue to be operated safely in flood risk terms, without increasing flood risk elsewhere; it is therefore considered appropriate development in accordance with the NPPF.

### 3.0 Introduction

The site boundary is provided in the location plan in Appendix A.

The FRA combined a desktop study, review of available information, consultations and an assessment of all sources of flooding posed to and from the site and proposed development, in accordance with National Planning Policy Framework (NPPF). Appropriate flood mitigation measures were then considered, either as already incorporated within the scheme or recommended for inclusion at detailed design stage. The suitability of the proposed development was also reviewed in the context of the NPPF and the technical guidance accompanying the NPPF.

### 4.0 Purpose of the Report

This FRA has been carried out in accordance with National Planning Policy Framework (NPPF). It is to be used to assist the Local Planning Authority (LPA) and Environment Agency (EA) when considering the flooding issues of the proposed development as part of a planning application.

The report provides the following information:

- An assessment of the flood risk posed to the site based on flood information and mapping provide by the EA and Strategic Flood Risk Assessment (SFRA);
- An assessment of the proposed development in terms of surface water run-off; and
- Proposals for measures to mitigate the flood risks posed to and from the development where appropriate.

### 5.0 Report Information Sources

The information source used to undertake this FRA has been collected from the following sources:

- British Geological Survey Website & iGeology App
- EA Website
- Haringey Strategic Flood Risk Assessment (2013) (supercedes other versions where appropriate)
- DRAIN London Haringey Preliminary Flood Risk Assessment (2011)
- Internet mapping and searches.

### 7.0 Overview of British Legislation

#### 7.1 National Planning Policy

The National Planning Policy Framework (NPPF) and accompanying Technical Guidance was published on the 27th March 2012. This supercedes all Planning Policy Statements (PPS's) and remaining Planning Policy Guidance (PPG's). Flood risk is retained as a key development consideration and is incorporated within Section 10: "Meeting the challenge of climate change, flooding and coastal change":

"Inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk, but where development is necessary, making it safe without increasing flood risk elsewhere."



The Sequential and Exception Tests (as per PPS25) are retained as part of the NPPF. The accompanying NPPF Technical Guidance also includes Tables 2 and 3 (similar to Tables D2 & D3 of PPS25) to assist with flood risk vulnerability classifications and development suitability.

## 7.2 Local Policy

Royal Borough of Kensington and Chelsea and The London Plan (as amended) consider flood risk through relevant environmental and climate change policies which enforce the requirements of the NPPF.

The Strategic Flood Risk Assessment (SFRA) and Surface Water Management Plan (SWMP) for RBKC are key sources of flood risk specific information for the area. The SFRA/SWMP provide more detailed review of flood risks and recommendations for ensuring developments can be constructed and operated safely in accordance with the NPPF. Greater detail is provided in the report.

## 8.0 Site Status and Environmental Setting

### 8.1 Site Location and Status

The site is c. 0.05 hectares and located c. 30m north of Tottenham bus depot, with Tottenham High Road adjacent to the east, surrounding commercial properties to north and west and Library Court to the south. The site location plan can be seen in Appendix A.

### 8.2 Current Site Description

The following description is based on information made available from internet mapping and aerial photography. The site is currently occupied by an existing commercial building and hardstanding. The site is 100% impermeable.

### 8.3 Existing Flood Risk

Flood Sources	Site Status	Comment on flood risk posed to / from the development
Fluvial / Tidal	Site is in Flood Zone F21 Low Risk	Scheme can reduce flood risk overall by increasing amount of permeable areas on the site. Proposed development is new build which can incorporate suitable mitigation measures. Basement bedrooms and flat are considered appropriate given residual risk
Groundwater	SWMP indicates site in potential elevated future groundwater risk	The proposed development will not increase the risk of groundwater flooding; lower ground site will not displace groundwater body The lower ground extension can be engineered / waterproofed appropriately Low Risk
Artificial Sources	No artificial sources within 250m	Low Risk
Surface Water / Sewer Flooding	Site is located adjacent a surface water risk zone Condition, depth and location of surrounding infrastructure uncertain	If required: external landscaping mitigation to encourage floodwaters away from access / egress points Development will utilise existing connection to sewers, gravity drainage and non-return valves. Development will not increase the peak flow or volume of discharge from the site. Low Risk No further drainage assessment required

Climate Change	Included in the flood modelling extents Site not within climate change flood extent area	Development will not significantly increase the peak flow and volume of discharge from the site Low risk posed to and from the development
----------------	---	---

#### 8.4 SFRA & SWMP Depth & Hazard

The PFRA / SWMP indicate:

- Site is not within a Group area designated as critical drainage issue area
- SFRA Figures 5-24 to 5-27 1in100year 6hr to 72hr rainfall event suggests site in 1km grid reference with up to 120mm depth of flooding i.e. low to medium risk

#### Design Response:

- Potential external landscaping to encourage waters away from entrance eg: front access. A simple additional step up / step down would be an appropriate precautionary design measure but not considered necessary given the residual risk
- Another precautionary measure would be to ensure waterproofed door frame / flood gates on ground access points to minimise risk of residual floodwaters entering the basement; again this is not considered necessary given the residual risk posed to the site
- Fully waterproof (new lower ground structures to be tied in appropriately)
- Reduce flood risk overall: new grassed /soft landscaping will increase permeable areas on the site which is an appropriate response / betterment given the local area surface water residual flood risks

#### 9.0 Assessment of Proposed Development

##### 9.1 Proposed Development

The proposed development can be seen in Appendix B.

The proposed comprises:

- Demolish existing buildings
- Erect new 4 storey mixed use scheme with basement dwellings
- REDUCE FLOOD RISK OVERALL: New soft landscaped areas at access to property indicates reduction in impermeable areas

Given the flood hazard setting, raised floor levels are not considered necessary.

**Potential Precautionary Additional Mitigation (not necessary given LOW - Moderate risk and scheme):**

- External landscaping as a flood resistant approach, encouraging water away from entrance points.
- Waterproofed door frames / floodgates at ground and lower ground access points

These are considered precautionary and not necessary given the residual risk.

#### Drainage

The existing connections will be retained with new connections as required by Thames Water; non-return valves for the lower ground can be utilized as standard.

The development will utilize the existing connection to adjacent sewers where appropriate. The drainage strategy (designed by others) where appropriate should be designed based on the following:

- Separate foul and surface
- Capacity based on the 1 in 100 year storm including for climate change



- Thames Water consent as necessary
- Meet London Plan and Local surface water management policy as appropriate

See also section on SUDS & flood resilient measures that can be incorporated as appropriate.

The following flood resilient measures are to be incorporated as appropriate:

## 9.2 Flood Resilience

The proposed development will utilize the flood resilient techniques recommended in the NPPF Technical Guidance where appropriate and also the recommendations that have previously been issued by various councils.

- Lower ground to be fully waterproofed (tanked) and waterproofing to be tied in to the ground floor slab as appropriate; details to be provided at detailed design to building regulations requirements
- Waterproofing to be installed to 600mm above ground level as appropriate
- Plasterboards will be installed in horizontal sheets rather than conventional vertical installation methods to minimise the amount of plasterboard that could be damaged in a flood event
- Wall sockets will be raised to as high as is feasible and practicable in order to minimise damage if flood waters inundate the property
- Any wood fixings on ground / lower ground floor will be robust and/or protected by suitable coatings in order to minimise damage during a flood event
- Airbricks will be raised to as high as is feasible and practicable
- The Damp Proof Membrane and lower ground waterproofing will be installed above the main floor slab and tied in to the walls where appropriate, to reduce the turnaround time for returning the property to full operation after a flood event.
- As necessary: the concrete sub floor will likely be laid to fall to drains or gullies which will remove any build-up of ground water to a sump pump where it will be pumped into the mains sewer. This pump will be fitted with a non-return valve to prevent water backing up into the property should the mains sewer become full
- Insulation to the external walls will be specified as rigid board which has impermeable foil facings that are resistant to the passage of water vapour and double the thermal resistance of the cavity

## 9.2b SUDS

The site is 100% impermeable as existing; the scheme incorporates amenity areas and permeable areas at the access areas, there will be no increase in impermeable areas, rather the scheme will reduce flood risk overall by increasing permeable areas on the site.

Given the site is defined by mostly the footprint of the building on existing 100% impermeable and mostly built-out site (i.e. constrained), the fact that the scheme will not increase impermeable areas, SUDS will be limited but there are options to maximize the reduction in discharge from the site:

### Concept SUDS Strategy

The following diagram indicates the philosophy behind the proposed SUDS strategy, and is taken from the EA's SUDS guidance:



{Source: Environment Agency, 2009}

The Table below indicates the SUDS Hierarchy Appraisal for the site and proposed development:

**Table 2: Site Specific SUDS Appraisal**

SUDS Hierarchy	SUDS Technique	Potential Benefits			Site Specific	
		Flood Reduction	Pollution Reduction	Landscape & Wildlife Benefit	?	Scheme Specific SUDS Suitability Appraisal and Comment
<div style="text-align: center;"> <div>Most Sustainable</div> <div style="margin: 10px 0;"> <div style="width: 100%; height: 100%; border-left: 1px solid black; border-right: 1px solid black; position: relative;"> <div style="position: absolute; top: -10px; left: 50%; transform: translate(-50%, -100%);">↑</div> <div style="position: absolute; bottom: -10px; left: 50%; transform: translate(-50%, 100%);">↓</div> </div> </div> <div>Least Sustainable</div> </div>	Living Roofs	*	*	*	+	Could be incorporated subject to roof construction
	Ponds / Basins	*	*	*	x	Not appropriate at the site
	Swales	*	*	*	x	Not appropriate at the site
	Infiltration Techniques	*	*		+	New permeable areas could infiltrate naturally – subject to detailed design and confirmation of the physical and chemical properties of the ground. More likely that will be used storage
	Permeable Surfaces	*	*		✓	New permeable areas. Lined cellular storage could be possible subject to detailed design / ownership
	Tanked Systems	*			*	If required as part of the drainage strategy, this would be used as back up to ensure 1 in 100 year +cc storage can be achieved on site if necessary.
<b>Key:</b> Potentially suitable at the site: *      Incorporated in the scheme: ✓      Not suitable / possible at the site: x						

### 9.3 Refuge and Evacuation

Based on the likely flood risk and associated warning time, evacuation is usually preferred and feasible at this site, floodwaters are also not likely to enter the building; refuge is a preferred flood response for the upper dwelling.

#### Range of Flood Events

The site is in FZ1 and therefore also outside of the flood extent in the unlikely event of a breach in the defences. The evacuation and flood management does not need to consider this fastest type of flood inundation.

Surface water flooding is unlikely to be of a long duration.

It is therefore considered likely that there would be sufficient time to seek refuge and/or evacuate to an area outside of the surface water flooding.

#### Preliminary Evacuation / Refuge Plan

##### Range of Flood Events

The site is within the residual surface water flood risk area; it is therefore considered that:

- Evacuation is usually the preferred response and is feasible at this site with observations of flooding to the east
- Refuge for upper level dwelling site users above ground level is the correct emergency strategy for all flood warning types
- Evacuation for lower ground dwellings is appropriate



Floodwaters are not likely to reach the entrances given the highway is a preferential pathway and sensitive landscaping at entrance points to the ground and lower ground can encourage waters away from the building.

#### 9.4 Flood Response Management

##### Flood Safety Pack

Occupants should ensure a flood safety evacuation pack is kept in a safe and easily accessible place. This should include as a minimum:

- First aid kit
- Torch
- Warm clothing or blanket
- List of appropriate contact numbers
- Bottled water
- Waterproofs / Wellington boots
- Non-perishable food

#### 9.5 Annual Monitoring

Occupiers should contact the EA on an annual basis to confirm the flood status of the property.

If the flood status has changed, the evacuation and refuge plan should be reviewed and updated by suitable flood risk consultants as appropriate.

#### 9.6 Surface Water Runoff – Flood Risk from the Development

In accordance with the NPPF, this FRA also considers the risks posed from the development to surrounding areas.

Given there will be no increase in impermeable areas it is considered there will be no increase in surface water discharge from the site; the proposed development will also continue to use existing / have new connections to the existing main sewers.

The proposals will incorporate new low-water demand devices such that there is not likely to be an increase in peak flows or volume of flows.

Given the proposed development it is considered likely that the development will have no effect on surrounding infrastructure. There will not be any significant increase in overland flow from the site.

#### 9.7 Climate Change

The impact of climate change in accordance with the NPPF is likely to be an increase in the rainfall intensity in the future, which will increase peak storm flows to sewer. The proposed development will incorporate low flush and reduced water demand showers and toilets, such that the combined flows to sewer are likely to have a negligible impact. It is considered therefore that flows in the future are not likely to have a significant impact, even with an allowance for climate change.

Confirmation from Thames Water should be sought as appropriate.

#### 9.8 Flood Risk Vulnerability

According to the NPPF retained Flood Risk Vulnerability Classification as per the former Table D2 in PPS25, the upper dwellings would be classed as "More Vulnerable", the lower ground dwellings would be classified as "Highly Vulnerable".

The NPPF also retained Flood Risk Vulnerability and Flood Zone "Compatibility" Classification as per the former Table D3 of PPS25; this states that both "More Vulnerable" and "Highly Vulnerable"



developments in Flood Zone 1 are appropriate and do not require the Exception Test (retained by NPPF) to be passed.

Based on the data reviewed to date, the flood risk assessment recommends the development could be constructed and operated safely in flood risk terms, without increasing flood risk elsewhere.

#### 10.0 Conclusion

The site is considered to be generally at a low risk from all sources of flooding except the potential residual surface water risk; the EA website map and SFRA indicate the site is in Flood Zone 1.

The proposed development is categorised as "More & Highly Vulnerable" in accordance with the NPPF; it is therefore an appropriate type of development within Flood Zone 1. Suitable mitigation measures can be incorporated.

The scheme reduces flood risk overall by increasing the amount of permeable areas on the site which is an appropriate response to the local area surface water flooding residual risk.

The proposed scheme can incorporate suitable flood resilient measures and flood exclusion precautionary mitigation measures.

Based on the likely flooding risk, it is considered that the proposed development can be constructed and operated safely in flood risk terms, without increasing flood risk elsewhere and is therefore appropriate development in accordance with the NPPF.

#### 10.1 Recommendations for Further Work

1. Waterproofing and flood proofing details for lower ground / ground levels to be confirmed
2. Drainage designs and SUDS to be confirmed by drainage engineers as part of conditions sign-off

#### 11.0 Appendices

- A. Site Location & Existing Plans
- B. Proposed Development Plans

## Appendices A &amp; B

# TOTTENHAM WAR SERVICES INSTITUTE

399 - 401 HIGH ROAD, TOTTENHAM, LONDON N17 6QN

## STATEMENT OF HERITAGE SIGNIFICANCE



21 JANUARY 2015

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ELIZABETH MOORE ARCHITECT & HERITAGE CONSULTANT  
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## INTRODUCTION

This Statement of Heritage Significance has been commissioned by David Alton of ADA Architects on behalf of Alto Property Investments Ltd, and has been drafted by Elizabeth Moore.

Tottenham War Services Institute, the owner of 399-401 High Road, runs a charitable foundation called 'Chances' which provides facilities and support for disadvantaged people in Tottenham; the building also houses other small charities and is a venue for local arts activities.

As funding is increasingly limited, the charity has agreed an arrangement with developers Alto Property Investments Ltd, to refurbish the existing building and redevelop part of the site for residential use. The charity will retain some flats for use and for rental income, and the developer will retain the remainder of the flats.

## THE SITE

The building at 399-401 High Road comprises a pair of late eighteenth-century stock brick three-storey houses, with a lower nineteenth-century addition on the south side, and a late twentieth-century large single-storey extension at the back. The building is set back from the road.

The existing building is listed grade II, and the site is covered by two conservation areas: the Tottenham Green conservation area, and the Tottenham High Road Historic Corridor. The building was listed in 1974 and this listing has not been updated, so the list description describes the building before a fire and subsequent rebuilding of the late 1980s.

Two buildings adjacent are unlisted but are considered to be of historic interest, noted on LB Haringey's Register of local listed buildings of merit. These are 391 High Road, to the south, and 413 High Road to the north. No 391 was formerly Tottenham Library, a decorative red-brick Edwardian building with stone dressings and pargetted gables, built in 1896 by Edmeston & Gabriel, now converted to flats. No 413, the former Felters Hall, is a 1926 Jacobean-style addition to the nearby High Cross School, designed by H G Crothall of Middlesex County Council, and is currently used as a church. Each building is separated from 399-401 High Road by service roads leading to housing developments set further back from the High Road.



*399-401 High Road in context, from the south-east (left) and from the north-west (right)*



## HISTORY

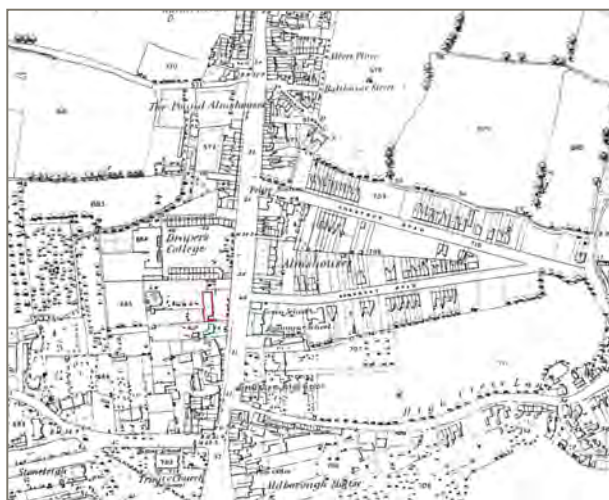
Tottenham is one of the major settlements on the old Roman road of Ermine Street, which ran from London to Lincoln, starting from Bishopsgate (one of the seven gates in the wall of London) and running via Shoreditch and Stoke Newington, through Tottenham on the line of what became the High Road.

The location of the present house is shown on the earliest map of 1619,<sup>1</sup> north of High Cross Green, as part of land belonging to Mrs Candler. Daniel Defoe describes how this area was developing in 1726: 'The increase of buildings is so great ... that they seem to a traveller to be one continued street; especially Tottenham and Edmunton, and in them all, the new buildings so far exceed the old, especially in the value of them, and figure of the inhabitants, that the fashion of the towns are quite altered.' He observed that the builders were generally of the 'middle sort of mankind, grown wealthy by trade', some of whom lived in the city and the country at the same time, and many 'immensely rich'.<sup>2</sup>

The building itself appears on the Wyburd survey map of 1798,<sup>3</sup> and was probably built after 1750. The High Road in the eighteenth century was a mixture of terraced houses and large mansions and villas standing in their own grounds. In 1810 the pair of houses is shown on the turnpike map as a central block with smaller extensions to the north and south.

By 1864<sup>4</sup> the area was starting to be built up, with Drapers College & almshouses to the north and a grammar school opposite. To the south there was a mixed terrace of larger and smaller buildings on the street front. 399-401 High Road is clearly shown as a pair of houses, set back from the road behind a shared sweeping drive & forecourt. Both houses have long rear gardens set out with paths and trees, with a large glasshouse at the end of the (larger) north garden.

Development was progressing quickly in the streets to the east by the 1890s; there is a marked difference in the terraces of houses between the pre-1894 & 1896 maps. 399-401 High Road is now shown with an extension identified to the north, and the southern house has a small glazed rear extension or conservatory. The large glasshouse is replaced in the 1890s by smaller separate glasshouses in the north garden and along the party fence.



Maps of pre-1894 (left) and 1896 (right) showing increasing development in the area



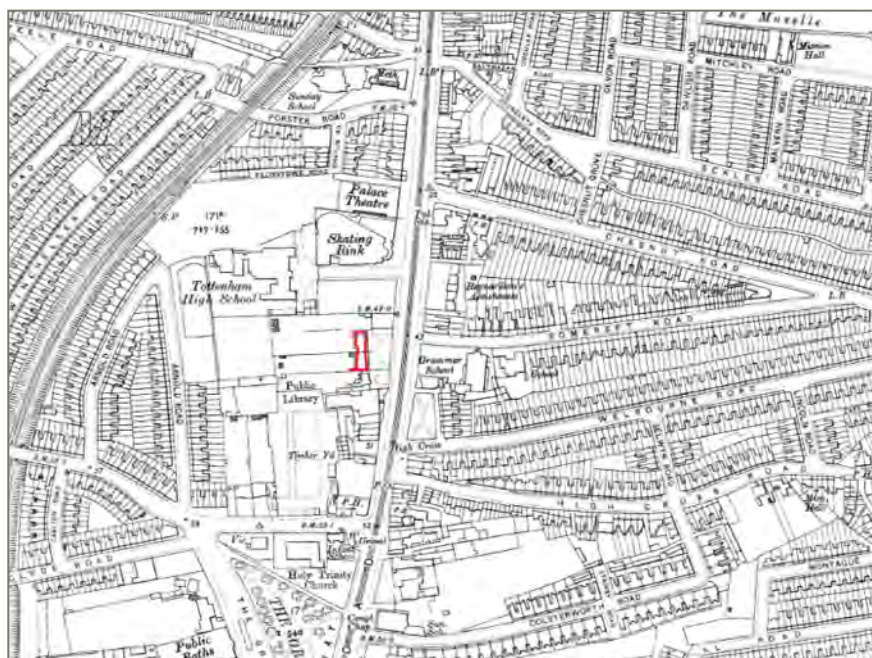


*Photograph of c1890: the surgery & residence of Dr E H May*

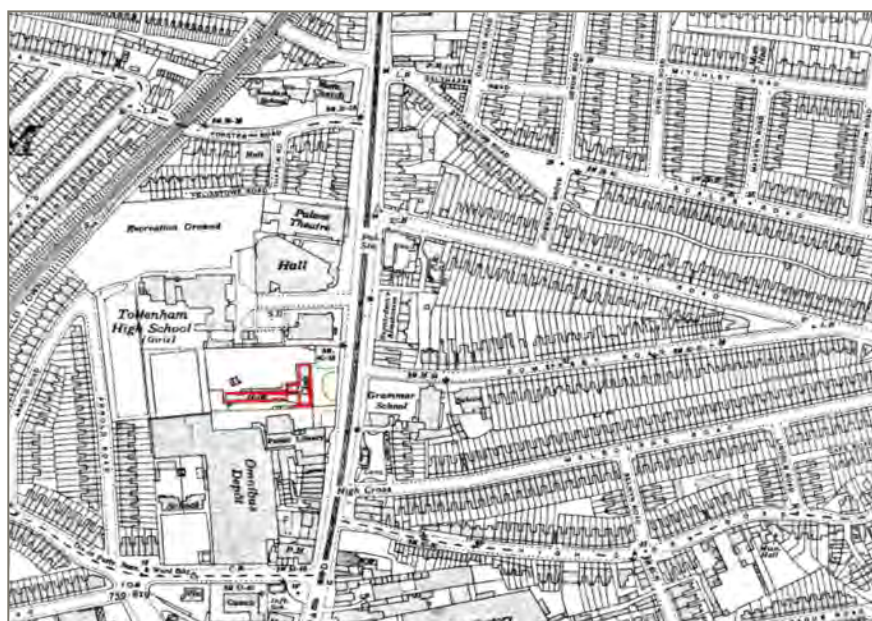
An early photograph of c1890<sup>5</sup> shows the southern half of the house (399), noted as the surgery and residence of Dr E H May. As now, it is three storeys above a half-basement, and is built of brick with stone sills and gauged-brick slightly curved arches to the windows. There is a stone cornice with modillions above the third floor, with a parapet wall above. The sash windows are 6x6 except on the raised ground floor (2x2). The doorcase has a broken pediment with modillions, set on a pair of ionic columns on bases, over an arched door opening. The door has four fielded panels above and one flat panel below, with a radial fanlight over. There are eight steps up to the door (at raised ground floor level), with no balustrade.

The northern half of the building is not shown. To the south side there is a mid-nineteenth century lower two-storey extension set slightly forward, built of brick with a simple stone coping on the high parapet wall. Two steps lead up to a ground floor door with a three-light fanlight. There is one 6x6 sash window to the ground floor and another centrally placed at first floor level in line with the rest of the first floor windows. There is a recessed rectangular panel in the brickwork below the first floor. There are two windows in the south wall and a chimney at the back. Behind a timber boarded gate & fence to the south is a lower 1 1/2 storey brick stable building surrounding a small yard; the building has a wide lower door, and a window and door to the loft above. Behind a parapet wall is a low-pitched clay pantile roof. This yard arrangement is shown on the pre-1894 map, but had been infilled by the time of the 1895 map, which is likely to be the date of the present rear building on the south side. The garden area of the sweeping driveway is separated by post & chain fencing. A boy in a waistcoat & cap stands outside, while two girls look through the window.

Maps from 1913 & 1915 show the houses in the same form (with fewer glasshouses in the garden), but with new developments growing around it: to the north, the Canadian Skating Rink (a roller skating rink that opened in 1910, but was soon converted to a cinema); to the north-west, Tottenham High School, and to the south, the public library (built 1896, see above).



Map of 1913



Map of 1935 showing addition of rear extension

The houses were marked as separate properties with their own gardens on the 1915 map, but by 1935 they had been combined into a single 'club' building, with a long 'hall' behind, running west-east and occupying most of the southern garden. The entrance door to the northern house (401) had probably already been changed to a window (see below). On a 1955 map the club/hall is first identified as the British Legion Club. This configuration existed up until the 1980s, when the building was gutted by fire and subsequently rebuilt.



The changed form of the houses is clearly shown on a photograph of c1970.<sup>6</sup> The British Legion Club's large signboard stretches across both halves of the house. The northern extension was occupied by Toc H, which was a servicemen's Christian club.



*Photograph of c1970*

On this full view of the houses it can be seen that 401 differs from 399 in having three full-height windows on the first floor, and no doorway; however, there are indications of rebuilding around the northernmost ground floor window where a door corresponding to the southern half would have been; the sills of the windows have been lowered (a fashion around 1820), and the door is likely to have been relocated at the same time. There is a central chimney. Other rebuilding is evident: the cornice has gone and the parapet wall has been rebuilt; the face of the southern extension also appears to have been rebuilt (the parapet wall clearly so), as the recessed panel has disappeared, and the chimney has been truncated. The first floor windows and those of the extension have lost their glazing bars, and the window reveals are now stucco-lined. Wiring trails across the facade.

The stables have been replaced by a two-storey addition to the rear, with a large chimney and hipped roof (c1894); this evidently originally had another single-storey block with a pitched roof running west-east, which had already been demolished and replaced by a flat-roofed shed. The northern extension is a low brick building of uncertain form; it appears to have a flat-roofed front half with a higher part at the back. The entrance is a half-glazed door with a fanlight above. The list description<sup>7</sup> suggests that this is late nineteenth century, and it is unlikely to be the original northern extension.

The two houses are likely to have been built as a pair, and both had substantial lower-height additions at the ends of the main three-storey houses. The differing heights of these additions are not identifiable from the maps, but are visible on the photographs of c1890 and c1970. Both are late nineteenth century additions.

The forecourt, used for parking, is surrounded by panels of rustic rubble stonework with unpainted timber piers and fence above (in poor condition). A flagpole and signboard stand in front of the building.



*Photographs of c1980 (top) and photograph dated 28 July 1980 (above)*

Two photographs of c1980<sup>8</sup> show the houses in a similar configuration to the earlier photograph, but in a declining condition. The northern ground floor windows have vent-axias installed, and one pane has been replaced with a board. A panel of brickwork under the left-hand second floor window has been repointed. The British Legion Club signboard has faded and the flagpole is awry. The Toc H sign has disappeared from the northern extension, which can be seen to have a large nine-light window and a low garage extension to the north. The forecourt is overgrown with weeds and the fencing has gone (though the stone walling remains).



At some time in the 1980s there was a serious fire which seems to have gutted most of the building, and in 1988, listed building consent was granted for rebuilding the 'fire damaged building structure to match original in appearance and materials'. An additional listed building consent application to demolish the remains of the existing structure (likely to have been the southern extension) was refused.

The present building, though superficially the same as before, has been completely rebuilt, using reclaimed stock bricks. The windows are now all the same (ie the northern half does not have its longer first floor windows), with red brick flat arches instead of the historic slightly-rounded arches. All the sashes are now 6x6 lights. The arched door opening has been retained but there is no doorcase. Railing balustrades have been added on the entrance stairs. There is no chimney. The front part of the southern extension has also been rebuilt in a similar form to before, but there is no door. A neat single-storey extension with two sash windows and a door, and a slate hipped roof, completes the corner. The rear part of the southern extension appears to have survived the fire, and retains its late-nineteenth-century form; a room on the first floor of this building still has a modest cornice and chimneybreast. The extension to the north no longer exists.

Internally, the present floor plans bear no relation to the original plans of the houses: the front rooms of the two houses have been combined into single spaces on each floor with no subdivision, with a single staircase in the north-west corner (accessed via a door on the north side of the building), and another to the basement. Only the southern extension retains a cellular arrangement.



*Present-day view from the High Road (from the south east)*



*View from north showing rebuilt north elevation and c1990 addition*



*View from rear (west side) showing c1990 windowless hall*



*Detail of south extension showing scar of previous building*



To the rear of the houses is a large windowless brick hall, with a low pyramid roof and a fire escape door in the north-east corner. The neglected forecourt has a brick wall with brick piers enclosing panels of railings. There is a metal-fenced car park to the rear of the building. The western part of the site, formerly the gardens of the houses, was sold off, probably in the late 1980s, and now houses an L-shaped residential development called Nicholson Court, accessed via the lane to the north of the houses. The loss of the rear gardens, and the access road serving the housing development, have irrevocably compromised the setting of the listed buildings.



*The cornice & chimneybreast in the rear first floor room of the southern extension are the only elements of pre-fire internal decoration remaining, but are unlikely to date before 1890.*

## PROPOSED WORKS

The proposed redevelopment of the building, by ADA Architects, retains and enhances the existing historic building as premises for the Chances charity, and replaces the existing modern rear hall with new additions containing flats.

The present proposal attempts to restore some of the features of the historic building that were lost in the fire (or before), or that were incorrectly reinstated in the post-fire rebuilding of the 1980s. The proportions of the first floor windows of the right-hand half of the house will be altered to correctly replicate their pre-fire form (visible on photos of c1980), and the existing doorway at the front of the historic building will be converted into a window. A cornice will also be reintroduced (visible on photo of c1890). A new downpipe will formalise the vertical division between what was originally two houses.

The reintroduction of an extension to the north side, matching the two-storey mid-nineteenth-century southern extension (rebuilt pre-1970), balances the facade. The extensions house the entrances to the development via doorways in the style of the existing door. The additional development at the rear of the building replaces the 1980s windowless hall with a well-designed side and rear elevation in stock brick and slate to match the Georgian houses.

The entrance to the Chances area is via the door in the southern extension; the north door leads to the residential areas, which are mainly in the north extension and the new rear part of the building.

The new elements are designed with materials and features in keeping with the historic part of the building, and the new slate-covered mansard-roofed top floor is set back to reduce its visibility from ground level. The parts of the existing complex that are being demolished are all piecemeal twentieth-century additions.



*Proposed view of the redeveloped building from the High Road, showing the new northern extension balancing that on the south side*



*Proposed view of the rear (west) elevation of the extended building, showing how the forms, materials and scale are in keeping with the Georgian elevations on the front of the building*

## CONCLUSION

The principal significance of 399-401 High Road is its presence as a pair of simple but elegant Georgian houses in the streetscape. The original houses were almost entirely lost in the 1980s fire, having previously gone through a considerable decline in their fortunes over the twentieth century. The rebuilding after the fire, which was intended to 'match original in appearance and materials', was poorly carried out with inappropriate materials and details, significantly reducing the historic character of the exterior. No attempt was made to reconstruct the historic interior of the building (if it still existed before the fire).

The proposed redevelopment aims to rectify some of the deficiencies of the post-fire reconstruction, and the enhanced historic building will retain its prominence in the new scheme.

The existing pair of houses are presented and enhanced by the reintroduction of an extension to the north side; both houses formerly had lower-height extensions to the side, but only that of 399 still exists. The form of the northern extension shown on the c1970 and c1980s photographs is unclear, but it appears to be more of a workshop or garage than a residential building, and so the south extension is more suitable as a pattern for the reintroduction of a balancing entrance pavilion for the north of the building.

The residential additions have been carefully designed to work with the historic building in scale, style and materials, with the features of the historic building repaired to their correct pre-fire appearance.

The new development will enable the refurbishment of this neglected building and site, and will assist the Chances charity in continuing its useful work in the community, both by improved facilities and by the income from the new flats.

EM 21 Jan 15

## APPENDICES / SOURCES / ACKNOWLEDGEMENTS

### LIST DESCRIPTION

Note: this description was written in 1974 (before the fire and subsequent rebuilding) and has not been revised.

THE BRITISH LEGION CLUB, 401, HIGH ROAD N17

List entry no: 1079201

Date first listed 10 May 1974, no amendments

4415 HIGH ROAD N17 (West Side) Tottenham No 401 (The British Legion Club) TQ3389 26/111

11

Late C18 pair now as 1. Each house 3 storeys and basement, 3 windows. 2 storey, 1 window slightly projecting south extension. Stock brick with stone-coped parapet. Gauged near-flat brick arches to sash windows, some with glazing bars, in stucco-lined reveals. At left 8 steps to door of 4 fielded and 1 flat panels, with radial fanlight. Doorcase of Ionic columns with entablatures and open pediment enriched with modillions and dentils. Late C19 1 storey right extension and further set-back, mid-late c19 left extension.

Listing NGR:TQ3374689660

## CONSERVATION AREA CHARACTER APPRAISAL

### Tottenham High Road Historic Corridor conservation area character appraisal, section 7.12, p 47:

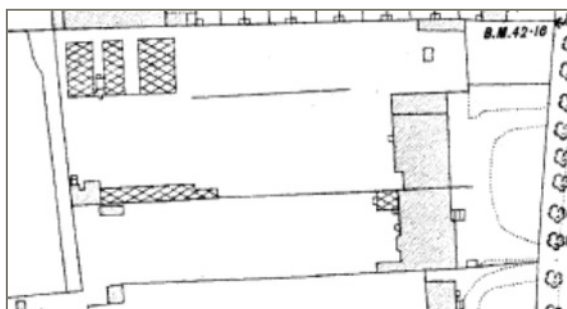
The adjacent buildings, Nos. 399 & 401 High Road, the Tottenham British Legion Club, are a pair of unadorned and much altered and rebuilt late 18th Century Grade II listed buildings, each three windows wide. They are set back from the High Road, their original large front gardens having been lost to a large unattractive swathe of tarmac used as a car park that severely detracts from their setting and the streetscene of this part of the conservation area. They are three storeys and basement, with a left side two storey extension, constructed of yellow London stock brick with a parapet with stone coped and gauged red brick flat arches over timber sliding sash windows with glazing bars.<sup>9</sup>

### FORMS OF THE BUILDING

1798	rectangular block
1810	central block with extensions to north & south
1864 - 1894	two houses with gardens laid out and large glasshouse; yard in southern extension
1896 - 1915	two houses with several smaller glasshouses; stairs to entrance of 399 shown
1936 - 1990s	site combined, with front block ('club') with long thin rear W-E extension ('hall')
1990s - 2015	present form (square block) with rear of site in separate ownership
2015 -	proposed form with new rear building and new extension to north side



1864 - 1894



1896 - 1915



1936



1955



2009 and present day



Proposed site plan

## HISTORICAL PLANNING APPLICATIONS

**OLD/1988/0572** Listed building consent for fire damaged building structure to match original in appearance and materials, for Royal British Legion; granted 14 Sep 1988.

**OLD/1988/1139** Listed building consent application for demolition of the remains of the existing structure; refused 14 Sep 1988.

**OLD/1989/0584+0585, 0586+0587** Planning permission & listed building consent for use of 1st & 2nd floors as offices; granted 26 Sep 1989.

**OLD/1987/1211+1212** retention of six 48-sheet advertising hoardings, refused 1 Oct 1987.

**OLD/9999/2439** conversion of 1st & 2nd floors into 2 x 2-bed & 2 x 1-bed self-contained flats; undecided.

**HGY/1995/0012+0057** PP & LBC for repositioning of existing fire escape staircase; granted 7 Mar 1995.

**HGY/1995/0594+0704** PP & LBC for erection of 15m high flagpole; granted 24 Jan 1996.

**HGY/1995/0595+0699** PP & LBC for erection of walls & railings, granted 5 Mar 1996.

**HGY/1996/0829** PP for change of use of part of ground floor to mini-cab office for Legion cab & courier service; 1-year temporary permission granted 20 Aug 1996.

## ACKNOWLEDGEMENTS

I am grateful for the assistance of the archivists at Haringey Archives, Bruce Castle Museum, and Kyle at Chances. Ordnance Survey maps Crown Copyright. The computer-generated proposed views are by ADA Architects.

## BRIEF RESUME

Elizabeth Moore is an architect & art historian with more than 25 years' historic buildings experience, both in the private sector and with English Heritage. She now runs a heritage consultancy, and recent work includes historical research, conservation plans, heritage surveys, listed building consent applications and conservation advice.

## REFERENCES

<sup>1</sup> Thomas Clay's survey map of 1619

<sup>2</sup> Daniel Defoe, A tour round the whole island of Great Britain, 1724-6, Letter 6

<sup>3</sup> Wyburd survey map 1798 (Tottenham High Road Historic Corridor conservation area)

<sup>4</sup> 1864 OS map (Tottenham High Road Historic Corridor conservation area)

<sup>5</sup> from Haringey archives: ref 872 HIG (T/4A ldbcm 2012:306

<sup>6</sup> c1970 photo from Haringey archives: ref 401 I/2, ldbcm:2013.1368.02

<sup>7</sup> list description written in 1974

<sup>8</sup> photographs from Haringey archives: c1980 photo: ref N732/20, ref 71, area 4, ldbcm:2013.01 20; 28 Jul 1980 photo: ref N1120/9 872 HIGCT) ldbcm:2013.1114

<sup>9</sup> London Borough of Haringey, Tottenham High Road Historic Corridor Conservation Areas No. 2, No. 9, No. 18, No. 22, No. 26 & No. 27, Conservation Area Character Appraisal





## **SUSTAINABLE DESIGN AND LIFETIME HOMES STATEMENT**

PROPOSED DEVELOPMENT

AT

399-401 HIGH ROAD

**TOTTENHAM LONDON N17 6QN**

FOR

TOTTENHAM WAR SERVICES INSTITUTE

ADA Architects Limited

11<sup>th</sup> March 2014

## **LIFETIME HOMES STANDARDS**

1. Disabled parking
2. Approach gradient to be level
3. External entrance will have automatic opening for wheelchair users and will have a clear minimum opening width of 900mm.
4. The main staircase and circulation space will comply with Part M of the Building Regulations.
5. Doorways and hallways to comply with Part M of the Building Regulations.
6. Wheelchair accessibility is provided.
7. Living room will provide for the needs of the disabled and for those with impaired sight.
8. All bed spaces will be at flat entrance level.
9. Bathrooms are available as an alternative in a wet room design with level entrance and flush floor drains. These are designed for ease of access to shower, wc and wash basin. A wheelchair user can gain access to the WC.
10. Bathroom walls to be fully tiled in contrasting colours.
11. Main lifts are to wheelchair standards and serve each floor.
12. Living room glazing is no higher than 800mm from floor levels and windows are easy to open. People are able to see out of windows whilst seated.
13. All controls, socket outlets, fixtures etc are set in accordance with Part M of the Building Regulations.

## **PARKING**

Disabled parking space is available within the site, within an acceptable distance of the entrance. Gradients will not exceed 1:60

## **ENTRANCE**

The approach to the entrance is level or gently sloping in accordance with the requirements.

The main entrance shall be level access over the threshold and shall be illuminated opening widths shall comply.

Flat entrances shall be level access over the thresholds with 800min clear width.

## **STAIRCASE AND LIFT**

The principle access stairs will provide easy access in accordance with Criterion 5a.

The lift will have a minimum internal dimension of 1100 x 1400mm and have clear landings of 1500x1500mm at the entrances.

## **INTERNAL DOORS AND HALLWAYS**

The minimum width of any hallway is to be 900mm in a private hall and 1200mm in a communal hall.

Doorway widths shall not be less than 775mm in the case of private doors and 800mm in the case of communal.

## **CIRCULATION SPACE**

There shall be space for turning a wheelchair in all dining area and living rooms and basic circulation space for wheelchair users elsewhere. A living room is provided on entrance level of every dwelling.

An accessible bathroom or shower room is provided on the entrance level of each dwelling, to provide a clear frontal approach zone and wheelchair turning space.

All bathrooms will be capable of firm fixing and support adaptations.

Windows in the principle living space will allow people to see out when seated.

## **CODE FOR SUSTAINABLE HOMES**

The Code for Sustainable Homes ( The Code) assessment method enables a development's environmental performance to be assessed by giving consideration to specific criteria including management, energy use, health and well being, pollution, land use, ecology, materials and water use. The method provides a benchmarking exercise by which the development can be assessed against current best practices in sustainability. The Code for Sustainable Homes assessment method rates the development using a scoring system. The system allows the development to achieve credits which standards, the development would achieve a higher score.

The Code scores development on a scale of 1 to 6 with 6 being an aspirational zero carbon home and 1 being a marginal improvement on the building regulations. The development proposals demonstrates that a Code 4 rating could be reached for the flats within the block.

The design of these proposals has considered the Code when formulating the developments sustainability measures. Where appropriate, this document draws parallels to the Code for Sustainable Homes when presenting the sustainability measures that are proposed for the development.

## **SUSTAINABLE DESIGN**

### **BUILDING REGULATIONS**

In addition to measures within the Code for Sustainable Homes, all of the buildings need to meet the requirements of the Building Regulations. These regulations allow the government to drive the industry to becoming more sustainable, by setting targets and minimum standards for design. In these cases standards will be met and improved upon where feasible.

## **INHERENT ASPECTS OF SUSTAINABILITY**

### **BACKGROUND**

Whilst the design of the development actively puts forward measures to contribute to sustainable development, various aspects of the scheme are inherently sustainable. These characteristics are acknowledged within this section.

### **ACCESSIBILITY AND PROXIMITY TO LOCAL AMENITIES**

The development site is within an area of London that public transport accessibility level of 6. This demonstrates a good level of accessibility to the local transport system. A net work of bus routes and railway stations are within a short walking distance from the site, this can promote the use of sustainable transport options in preference to the use of private cars.

In addition public transport, dedicated cycle routes are available. These routes tie in to wider cycle routes that serve the Borough. Cycle routes are particularly useful for commuting short distances. These could allow residents of the scheme to use bicycles over short journeys. The development also benefits from being within walking distance of a range of amenities, including shopping centres and local employment areas.

### **REDUCE THE DEVELOPMENT CONTRIBUTION TO CLIMATE CHANGE**

Rising levels of carbon dioxide (CO<sub>2</sub>) in the atmosphere from burning fossil fuels to produce electricity, drive transport, heat buildings and produce electricity, and produce food and other goods, including building materials. Energy use in buildings is responsible for a large amount of CO<sub>2</sub> emissions in Haringey Council. Methane produced from landfill also contributes to climate change.

#### **Policy aspirations.**

- Maximise energy efficiency through design
- Supply energy efficiency
- Using renewable sources of energy

### **Passive Solar Design**

Passive Solar Design (PSD) looks to utilise the sun as means of warming, as well as shade from neighbouring buildings and trees where practical to limit the building from overheating in summer months. The design has given consideration to the effects of external climatic factors on the performance of the proposed buildings. Where possible, the dwellings have been orientated to increase opportunities for solar gain.

## Improve U Values

A primary goal of the development is to use less energy by incorporating building materials, which would increase the thermal performance of the development. The resulting reduction in energy use would lower carbon emissions arising from the operation of the development. To do this the development would incorporate materials, which have U-Values that improve upon the Building Regulations – Part L requirements. The table below shows the proposed improvements to the building U Values for the proposal.

### Proposed Improvements in U-Values from the Part L 1 compliance.

Building Element	Part L Compliant	Proposed
Windows	2.2W/m <sup>2</sup> K	1.68 W/m <sup>2</sup> K
External walls	0.35 W/m <sup>2</sup> K	0.16 W/m <sup>2</sup> K
Roof	0.25 W/m <sup>2</sup> K	0.15 W/m <sup>2</sup> K
Ground Floor	.25 W/m <sup>2</sup> K	0.25 W/m <sup>2</sup> K

### Heath Loss Parameter

Code for sustainable Homes requirements ( ENe2) Building Fabric

Scheme Response: Variable credits are available on this credit depending on flat type.

Standard Assessment Procedure (SAP) calculations have been undertaken for the proposed dwellings based on the energy measures and building fabrics proposed as part of the scheme. The calculations suggest that the HLP for the dwellings would range from 0.96 W/m<sup>2</sup>K to 2.08 W/m<sup>2</sup>K depending on the position of within the apartment blocks. Dwellings that have higher surface areas such as top floor flats that include roof areas are likely to have a greater heat loss parameter as more surfaces are exposed to the outside environment.

## Ventilation

The building would be compliant to Part F of the building regulations – Means of Ventilation. To ensure buildings remain healthy and comfortable for occupants, natural ventilation would be the primary method used for ventilating the dwellings. Mechanical ventilation would also be supplied to the kitchen and bathroom areas.



## **SUPPLY ENERGY EFFICIENCY**

### **Metering**

If tenants are made aware of their energy and water usage, this will be an important aspect in controlling the use of these resources during the operation of the dwellings. To enable this, each flat would include a separate meter for water, gas and electricity. These would allow a tenant to monitor their own energy usage.

### **Appliances**

Appliances within a household can use a large amount of electrical energy. Should appliances be provided within the development, these would be energy efficient and awarded with an A rating under EU-Eco labelling scheme.

### **Low Energy Lighting**

Code for sustainable homes requirements (Ene 3): internal lighting

Scheme Response the proposal will not meet this requirement.

The proposal for this has specified the use of low energy lighting 30% of the fitting in accordance with building regulations. These would consist of compact fluorescent lamps (CFL's)

## **USING RENEWABLE ENERGY**

Code for sustainable homes requirement (Ene 3) Low or Zero Carbon Technologies

**Scheme Response: The proposal will meet these requirement.**

Having applied the improved building fabrics and energy efficiency measures to lower the sites demand for energy. The development has further reduced the carbon emissions through the inclusion of a renewable energy technology. Photovoltaic panels have been specified for the development. These panels generate electrical energy, which reduces the overall carbon emissions for the development.

## **IMPROVE AIR QUALITY**

Emissions arise from power plant, vehicles, chimneys and industry. Emissions of fine particles (PM10) and nitrogen oxides (NO x) are the most damaging. Dust blown from construction sites also contributes to external air pollution. Inside buildings, chemicals used in building materials and furnishings can lead to poor air quality. This is made worse by poor ventilation. Climate change will make air pollution worse as a result of hotter drier weather.

## **Policy Aspirations.**

- By 2015 annual average levels of fine particles (PM10) do not exceed 23/mg
- Annual average levels of nitrogen oxides (NO<sub>2</sub>) do not exceed 40ug/m<sup>3</sup>

## **General Approach Expected**

- Minimise emissions associated with design and construction of a development.
- Minimise emissions from energy systems.
- Ensure good levels of indoor air quality.

Many of the London Boroughs have Quality Management Area (AQMA). Specific objectives have been set for the control of PM10 and Nitrogen Dioxide. Local policies on air quality state concentrations of these emissions.

## **MINIMISE EMISSION ASSOCIATED WITH DESIGN AND CONSTRUCTION OF A DEVELOPMENT**

**Code for sustainable Homes requirements (Pol1): Global Warming Potential of insulants.**

**Scheme Response : The proposal adopts this requirement.**

Materials that are known to cause significant impacts on the environment would be avoided. No insulation materials with Ozone Depletion Potential (ODP) or that have Global Warming Potential (GWP) of greater than 5 would be utilised in the build. Materials which have an ODP value have now been made illegal, however stockpiles of the materials still exist. The applicant will ensure that the specification of insulation materials used within the build do not have an ODP.

## **MINIMISE EMISSIONS FROM ENERGY SUPPLY SYSTEMS.**

Space heating and hot water use represents a large proportion of the energy demand for the development. Individual boilers can also negatively contribute to air quality through the release of Nitrogen Dioxide (NO<sub>x</sub>) heating and hot water for the dwellings will be provided through individual boiler units that comply with SEDBUK "A" rating. These units will provide low-pressure heating and hot water for each development, and be of class 5 NO<sub>x</sub> specifications, resulting in an emission of less than 70 NO<sub>x</sub> mg/kWh.

**Code for sustainable Homes requirements ( Pol 2) NO<sub>x</sub> Emission**

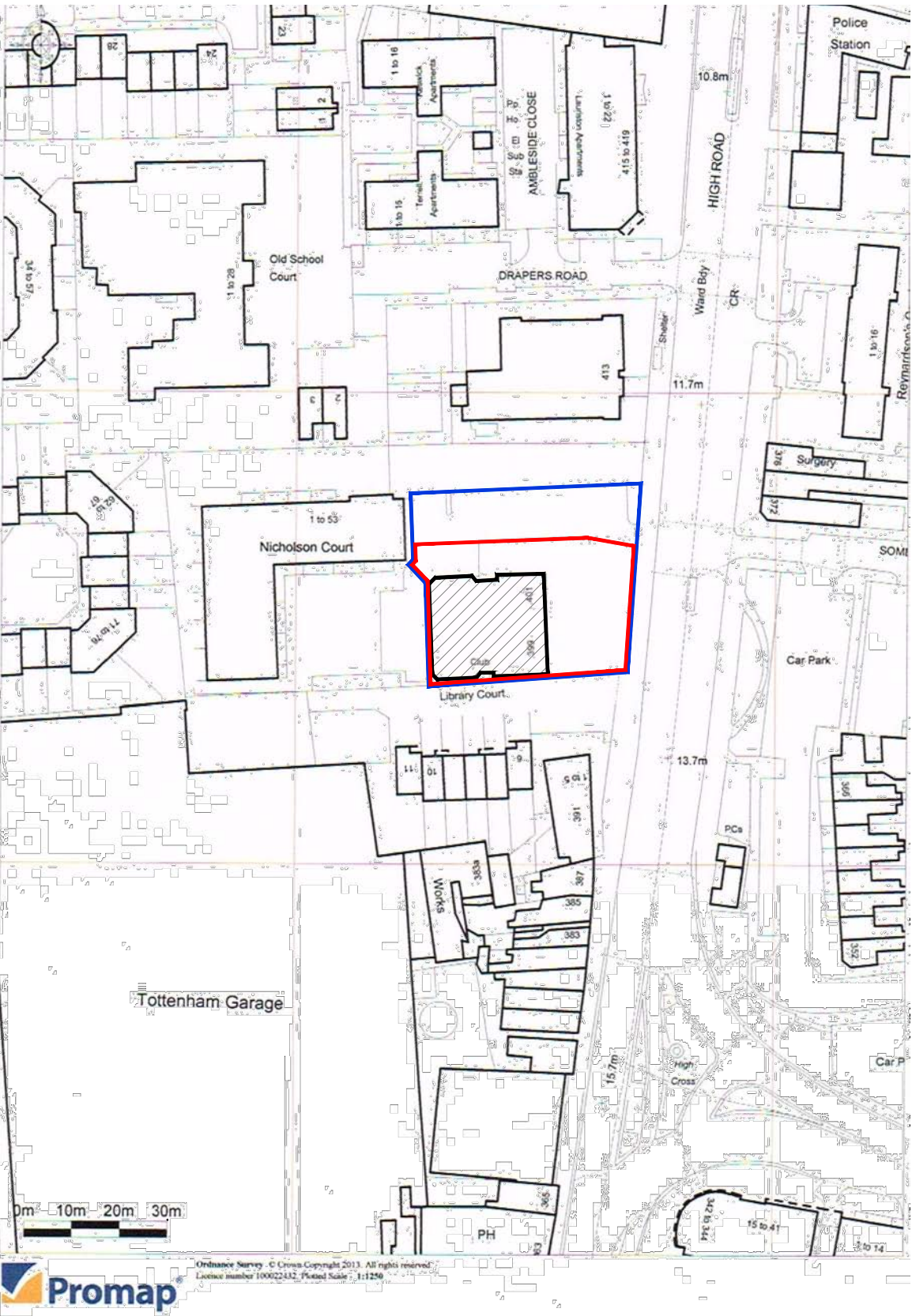
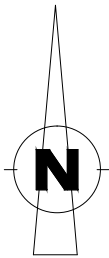
**Scheme Response: The Proposals will meet this requirement.**

## **ENSURE GOOD LEVELS OF INDOOR AIR QUALITY**

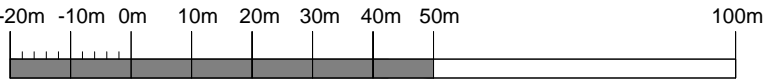
Indoor air quality would be promoted by following several design principles. This includes the avoidance of materials which are known to have detrimental effects on the indoor environment, whilst incorporating design principles to maximise ventilation and exposure to fresh rates.

**Avoidance of materials containing VOC's**

Indoor Air Quality would be promoted. The development would avoid using finishing materials which contain VOC's the use of paint and varnishes would be used that do not give rise to internal air pollution.



Location Plan



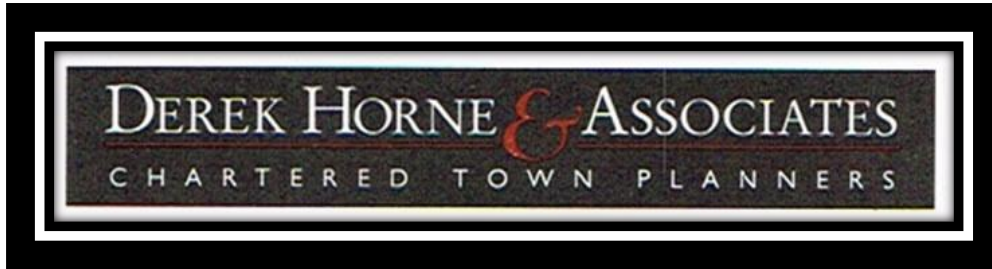
REV	DATE	COMMENTS
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PROJECT: 399-401 Tottenham High Road London N17 6QN	
SUBJECT: LOCATION PLAN	
DRAWING NO: 311/00	
SCALE: 1:1250 @ A2	DATE: JULY 2013
DRAWN BY: WLH	CHECKED BY:
REV:	



PLANNING APPLICATION FOR PART DEMOLITION OF AND  
ALTERATIONS AND ADDITIONS TO THE EXISTING BUILDING  
PROVIDING COMMUNITY FACILITIES TO BE USED IN  
CONNECTION WITH THE CHARITY 'CHANCES'  
PROVIDING 17 SELF CONTAINED FLATS AT  
399-401 HIGH ROAD, TOTTENHAM, LONDON N17

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PLANNING STATEMENT IN SUPPORT OF AN  
APPLICATION SUBMITTED ON BEHALF OF  
TOTTENHAM WAR SERVICES INSTITUTE

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## **1.0.0 INTRODUCTION**

**1.0.1** This statement has been prepared to support an application by the Tottenham War Services Institute to alter and extend existing buildings to provide community facilities and 17 self-contained flats.

### **1.0.2 The Site**

The application site comprises 399-401 High Road in Tottenham. It occupies a site measuring approximately 0.15 hectares. The site is currently occupied by a building containing 2 principal elements facing towards High Road. The first element comprises a building of traditional design and construction with pitched roofs varying in height between 1 and 2 storeys which provides community facilities, having previously been used by the British Legion. The second element comprises a part 2, part 4 storey building of more recent construction with flat roofs, which was used previously to provide office accommodation and which is currently partly used to provide some community services. To the rear of this building and attached to the front element is a single storey building with a pitched roof, which has been used as a function room.

## **2.0.0 RELEVANT PLANNING POLICY**

### **2.0.1 National Planning Policy Framework**

Paragraphs 6, 14 and 17 of the National Planning Policy Framework indicate Government support for sustainable development. Paragraph 17 also provides support for the effective use of previously developed land, such as this, promoting mixed use development.

**2.0.2** Paragraph 49 of The National Planning Policy Framework advises local planning authorities that housing applications should be considered in the context of presumption in favour of sustainable development. Local planning authorities are urged in paragraph 50 to deliver a wide choice of housing and create

sustainable, inclusive and mixed communities.

- 2.0.3** Paragraphs 56, 58 and 61 of the National Planning Policy Framework seek to promote good design responding to local character and history reflecting the identity of local surroundings and materials whilst not preventing or discouraging appropriate innovation.
- 2.0.4** Paragraph 69 states that policies and decisions should, inter alia, promote opportunities for meetings between members of the community through mixed development and strong neighbourhood centres, bringing together those who work, live and play in the vicinity.
- 2.0.5** Paragraph 72 advises that great weight should be given to the need to create, expand or alter schools and to work with schools to promote, identify and resolve key planning issues. Local Planning Authorities are urged to take a proactive and collaborative approach to meeting the needs of existing and new communities which will widen the choice in education.
- 2.0.6** Paragraph 77 encourages the delivery of the social, recreational and cultural facilities and services that the community needs. Local planning authorities are advised that they should plan proactively for the provision of shared space, community facilities and other local services to enhance the sustainability of local communities.
- 2.0.7** Paragraph 128 requires the significance of any heritage assets to be assessed including any contribution made by its setting.
- 2.0.8** **The London Plan 2011**  
Policy 3.4 encourages optimising housing output taking into account local context and character, the design principles in chapter 7, public transport capacity and the relevant density ranges as indicated in table 3.2.
- 2.0.9** Policy 3.5 advises housing developments to be of the highest

quality internally and externally and in relation to their context and to the wider environment.

2.0.10 in providing residential accommodation The London Plan sets out minimum space standards for new development.

2.0.11 Policy 3.16 provides support for the protection and enhancement of social infrastructure.

2.0.12 Paragraph 3.89 indicates that developments providing social facilities shall encourage, wherever possible, to extend the use of such facilities to serve the wider community.

2.0.13 The London Plan sets out maximum parking standards in table 6.2, to which reference is made in 6.13.

2.0.14 Under the provisions of policy 7.4 developments is required to have regard to the form, function and structure of an area, place or street and scale, mass and orientation of surrounding buildings.

2.0.15 Development affecting Heritage assets, such as this site, are governed by policy 7.8 which requires developments to identify value, conserve, restore, re-use and incorporate heritage assets in developments where appropriate.

**Haringey Local Plan Strategic Policies 2013-2026  
(Adopted March 2013)**

**2.0.16** Policy SP1 of the Local Plan indicates that the Council will focus Haringey's growth in the most suitable locations and seek to maximise the supply of additional housing to meet and exceed 8,200 homes between 2011 and 2021. The policy also indicates that the Council will promote development in areas which include the Tottenham High Road corridor.

**2.0.17** The table in paragraph 3.1.9 provides indicative ranges of housing provision within the Borough within 15 years

commencing with 2011, for various areas within the Borough. Policy SP2 confirms that the Council aims to maximise housing for people whose circumstances make them vulnerable and/or people with special needs.

**2.0.18** SP4 seeks to reduce energy use within buildings and promotes measures to reduce carbon emissions from new and existing buildings.

**2.0.19** Under the provisions of policy SP11 all new development is required to enhance and enrich Haringey's built environment to create places and buildings that are high quality, attractive, sustainable, safe and easy to use and to ensure they respect their local context and character and historic significance.

**2.0.20** Within the provisions of policy SP12 the Council indicates that it will ensure the conservation of the historic significance of Haringey's Heritage assets, including their setting and the wider historic environment.

**2.0.21** Policy SP15 seeks to safeguard and foster the Boroughs cultural heritage and promote cultural industries and activities.

**2.0.22** Policy SP16 indicates that the Council will seek to ensure appropriate improvements and enhancements and, where possible, the protection of community facilities and services for Haringey's communities and the promotion of multi-purpose Community facilities.

**2.0.23** The Unitary Development Plan 2006 (Saved Policies March 2013)

On the proposals map of the Unitary Development Plan the above site is identified as being included within a Conservation Area and an Area of Archaeological Importance to which the provisions CSV4, CSV5 and CSV8 apply.

- 2.0.24 Policy CSV4 applies to alterations and extensions to listed buildings, which are required to be necessary and not detrimental to the architectural and historical integrity of a listed building's interior and exterior and relate sensitively to the original building and not adversely to affect its setting.
- 2.0.25 Within Conservation Areas, policy CSV5 requires alterations and extensions to preserve or enhance the character of the Conservation Area and to retain or reinstate characteristic features.
- 2.0.26 Policy CSV8 requires applications to be accompanied by an archaeological assessment and evaluation of the site, including the impact of the proposed development. It also requires development proposals to preserve in situ, protect and safeguard important archaeological remains.

### **3.0.0 PLANNING CONSIDERATIONS**

- 3.0.1** The building complex the subject of this application contains a mixture of buildings varying from 1 to 4 storey's in height. The original building complex was the subject of severe fire damage as a consequence of which, substantial parts of the original structure have been replaced. The new replacement is much larger than the remaining part of the original building, both in height and mass, comprising 3 upper floors and 1 semi-basement. A further modern single storey addition has been built to the rear. This has, in the past, been used as a function room.
- 3.0.2** As is confirmed in the accompanying Heritage Statement the fire and the subsequent rebuilding have removed all of the historic interior and have significantly reduced the historical character of the exterior.
- 3.0.3** The building complex is set back from Tottenham High Road.

Within the forecourt there exists a large tarmac surfaced car park which shares an access on to Tottenham High Road with a car



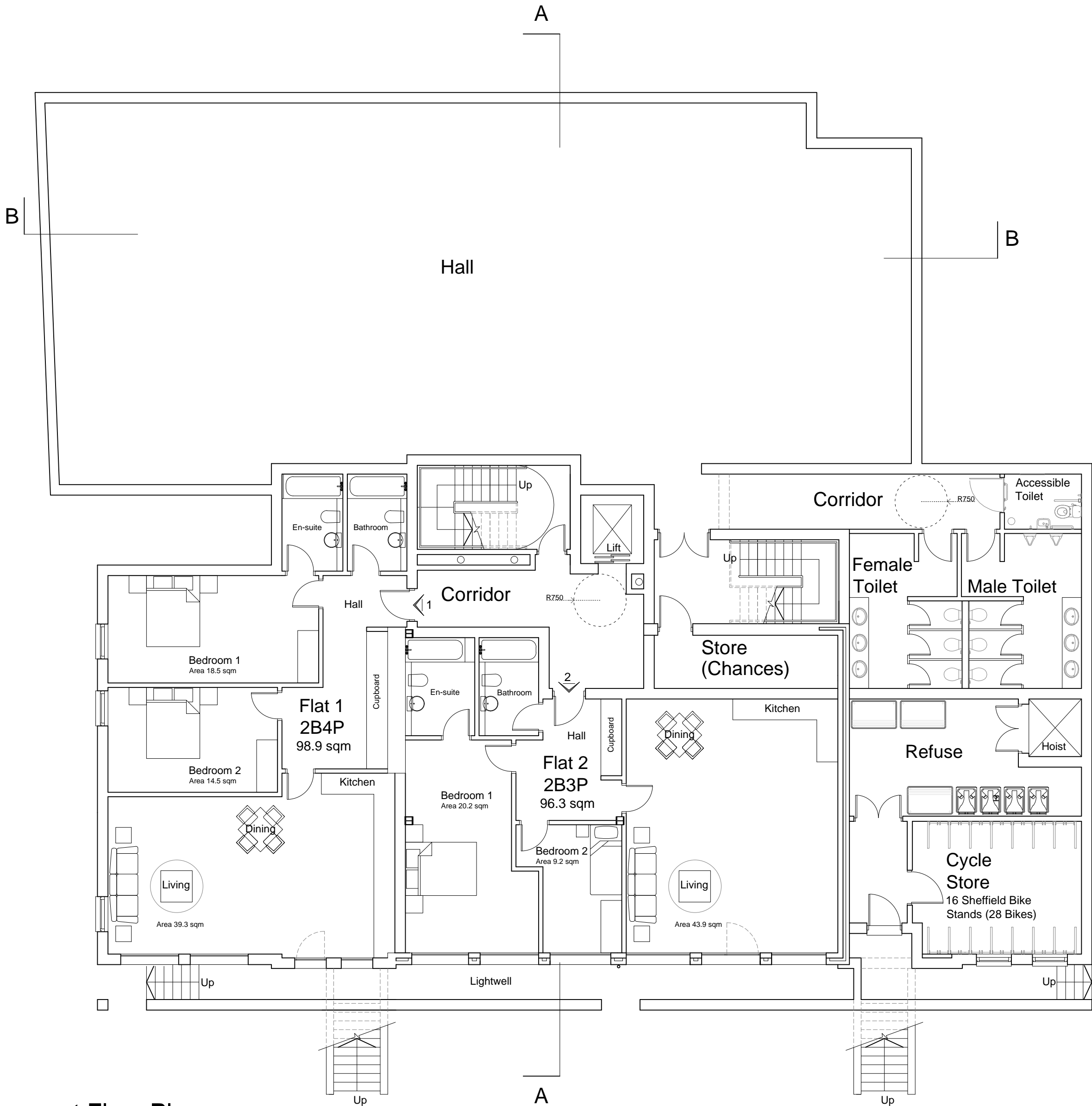
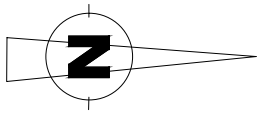
park located to the side, which serves Nicolson Court, a large 3 storey L-shaped block of flats of relatively recent construction, which is located to the rear.

- 3.0.4** To the south of the application site is situated a relatively new development comprising 6-11 Library Court, which comprises a complex of buildings varying in height from 1-3 storeys facing on to an access drive. This development overlooks the application site which is located on the opposite side of the access road.
- 3.0.5** To the north of the application site is situated a day nursery, occupied by the Alpha Day Centre, which is accommodated within an attractive 2 storey building of traditional construction which faces directly towards the application site.
- 3.0.5** The architecture within the vicinity of the application site varies considerably in terms of its style, scale and age.
- 3.0.6** The car parks serving the application site and Nicholson Court are poorly laid out. The lack of landscaping, the variation in the scale and design of the surrounding buildings and the materials used in their construction, the poorly designed refuse storage area for Nicolson Court, the timber decking within the application site and gating between the two car parks are features which considerably detract from the character and appearance of the Conservation Area. In addition the original listed building structure is now dominated by surrounding recent additions and new developments which, by virtue of their scale and location, diminish its presence within the street scene and have materially impacted on its setting.
- 3.0.7** The existing original building within the application site is poorly maintained and, in particular, it is noted that the roof of the remaining part of the original listed building within the application site is clearly unsound with the roof slates having been secured by bricks as a temporary measure.

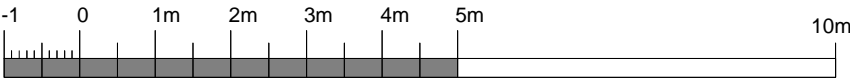
- 3.0.8** The proposals the subject of this application seek to sensitively alter and extend the existing building complex on the application site. These alterations include the demolition of the single storey building, used as a function room, immediately to the rear of the principal building and its replacement to provide a building with 4 upper floors and a basement. The proposed new building extends over the more recent 4 storey addition to the side of the original building. The proposed development will accommodate 17 self-contained 1, 2, 3 and 4 bedroom flats, whilst retaining accommodation within the original building for the charity at basement, ground, first and second floor levels.
- 3.0.10** It is intended for some of the proposed residential accommodation to be allocated to the charity for use to provide accommodation for the under privileged and the needy, whilst the remainder will provide residential accommodation suitable for the wider community.
- 3.0.11** In addition to providing much needed residential accommodation these proposals will generate revenue which will be much welcomed by the charity in ensuring they can retain and enhance the various community facilities and services they already provide.
- 3.0.12** The proposals will also enable the charity to refurbish the existing building complex and landscape the surrounding grounds.
- 3.0.13** The refurbishment of the building and the landscaping will bring about a significant improvement to the setting of the existing listed building. The proposed additions to the existing complex will compliment the architecture of those buildings already there. The scale of the buildings within the application site respect those of the surrounding area and, as is confirmed in the accompanying Heritage Statement, their form has been designed to work with the existing structure, retaining the existing interior spaces and leaving the only remaining historical element unaltered. It is considered that, coupled with the improvements to the forecourt and the boundary treatment, the proposals will bring about an

enhancement to the character and appearance of the Conservation Area.

- 3.0.14** Given the recent additions to the original building, both to the side and the rear, it is not considered that these proposals will cause material harm to the character and appearance of the original listed building or its setting.
- 3.0.15** The provision of much needed residential accommodation accords with Government advice, The London Plan and the provisions of the Haringey Local Plan and will enable the charity to maintain and indeed improve community facilities currently operating from the site in accordance with paragraphs 49, 50 and 77 of the National Planning Policy Framework, policies 3.4, 3.16 and paragraph 3.89 of The London Plan and policies SP2 and PS16 of the Haringey Local Plan.
- 3.0.16** By virtue of the improvements to the forecourt and the boundary treatment to the application site and the refurbishment to the original listed building, all of which will be funded by the proposed residential development, the proposals are considered to accord with policies 56, 58 and 61 of the National Planning Policy Framework, policy 7.8 of The London Plan and policies SP12 and SP15 of the Haringey Local Plan.
- 3.0.17** The plans of the proposals have been made available for the public to see and it is understood that there is broad support for these proposals, which are commended to the Council.



Basement Floor Plan

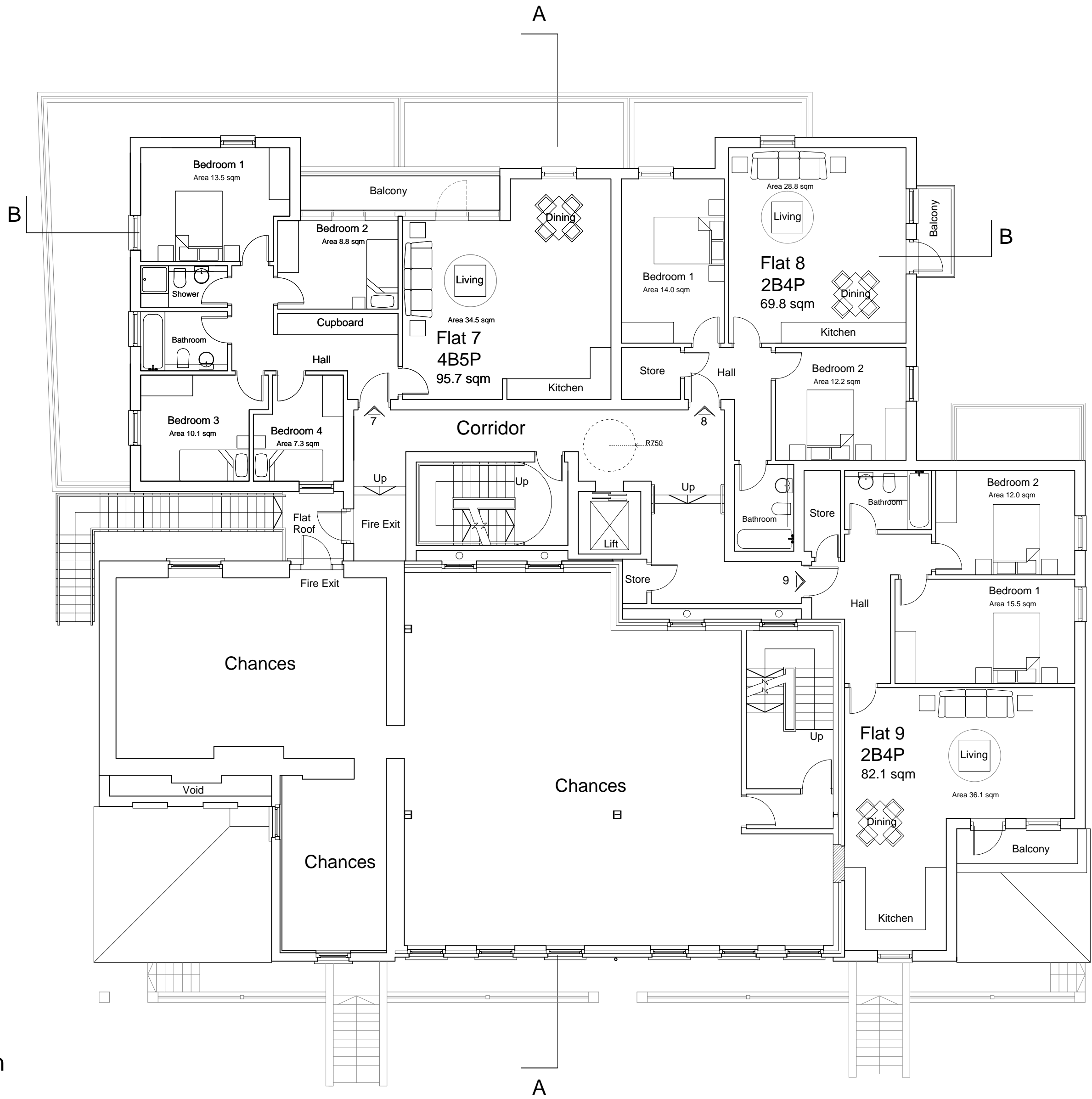
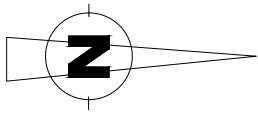


R	26-11-14	Layout revised to incorporate planners comments
Q	08-10-14	Layout revised
P	08-09-14	Layout revised
O	18-08-14	Layout revised
N	16-07-14	External windows/doors revised
M	08-07-14	Cycle store revised/steps added
L	02-06-14	Windows added to bathrooms in flats 1 & 4
K	23-05-14	Plan revised
REV	DATE	COMMENTS

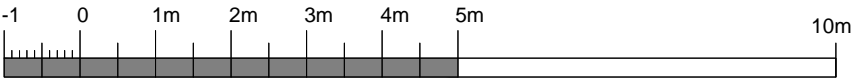
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PROJECT:	399 Tottenham High Road London N17 6QN
SUBJECT:	PROPOSED BASEMENT FLOOR PLAN
DRAWING NO:	311/12
SCALE:	1:100 @ A2
DATE:	JULY 2013
DRAWN BY:	PT
CHECKED BY:	DA
REV:	K L M N O P Q R



First Floor Plan



T	26-11-14	Layout revised to incorporate planners comments
S	24-10-14	Flat 8 revised
R	08-10-14	Layout revised
Q	08-09-14	Layout revised
P	18-08-14	Layout revised
O	18-07-14	Flats re-numbered/Flat 10 area revised
N	15-07-14	Plan revised to planners requirements
M	08-07-14	Flat added to north elevation
L	02-06-14	Window added to bathroom in flat 10
K	23-05-14	Plan revised
REV	DATE	COMMENTS

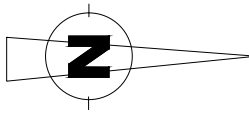
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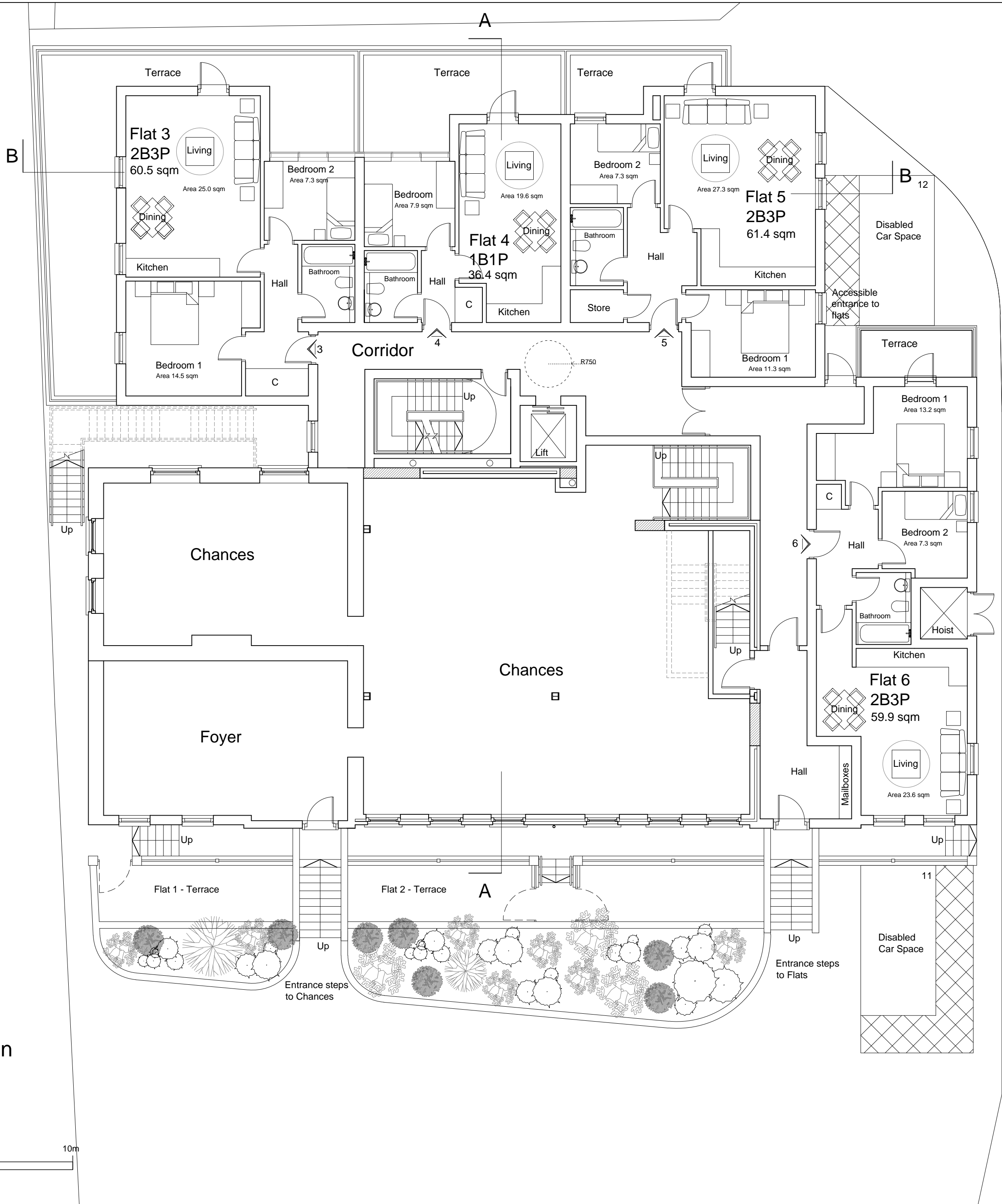
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SUBJECT:		PROPOSED FIRST FLOOR PLAN														
DRAWING NO:		311/14														
SCALE:		1:100 @ A2					DATE:					JULY 2013				
DRAWN BY:		PT					CHECKED BY:					DA				
REV:	K	L	M	N	O	P	Q	R	S	T						



Do not scale this drawing.  
Dimensions to be taken on site and all discrepancies reported to the CA



LIBRARY COURT



Ground Floor Plan

T	26-11-14	Layout revised to incorporate planners comments
S	24-10-14	Flat 4 revised
R	08-10-14	Layout revised
Q	08-09-14	Layout revised
P	29-08-14	Layout revised
O	18-07-14	Flat omitted and layout revised
N	15-07-14	Plan revised to planners requirements
M	08-07-14	Chances entrance re-configured
L	02-06-14	Window added to bathroom in flat 5
K	23-05-14	Plan revised
REV	DATE	COMMENTS

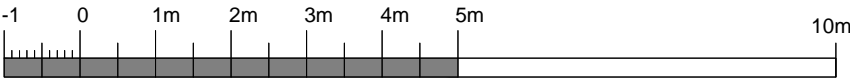
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PROJECT: 399 Tottenham High Road London N17 6QN												
SUBJECT: PROPOSED GROUND FLOOR PLAN												
DRAWING NO: 311/13												
SCALE: 1:100 @ A2								DATE: JULY 2013				
DRAWN BY:		PT						CHECKED BY:  DA				
REV:	K	L	M	N	O	P	Q	R	S	T		



High Road Elevation



R	07-01-15	Section of third floor mansard omitted to north side extension
Q	26-11-14	Elevation revised to incorporate planners comments
P	24-10-14	Brick window heads added
O	13-10-14	Elevation revised
N	08-09-14	Elevation revised
M	18-08-14	Elevation revised
L	15-07-14	Elevation revised to planners requirements
K	08-07-14	Elevation revised to re-configured plans
J	02-06-14	Roofline revised
I	23-05-14	Elevation revised
REV	DATE	COMMENTS

PLANNING

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PROJECT:		399 Tottenham High Road London N17 6QN									
SUBJECT:		PROPOSED HIGH ROAD ELEVATION									
DRAWING NO:		311/18									
SCALE:		1:100 @ A2					DATE: JULY 2013				
DRAWN BY:		PT					CHECKED BY:  DA				
REV:	I	J	K	L	M	N	O	P	Q	R	





North Elevation

R	07-01-15	Section of third floor mansard omitted to north side extension
Q	08-12-14	Mansard roof aligned with third floor plan
P	26-11-14	Elevation revised to incorporate planners comments
O	24-10-14	Third floor balcony revised
N	20-10-14	Elevation revised
M	08-09-14	Elevation revised
L	29-08-14	Elevation revised
K	15-07-14	Elevation revised to planners requirements
J	08-07-14	Elevation revised to re-configured plans
I	02-06-14	Roofline revised
H	23-05-14	Elevation revised
REV	DATE	COMMENTS

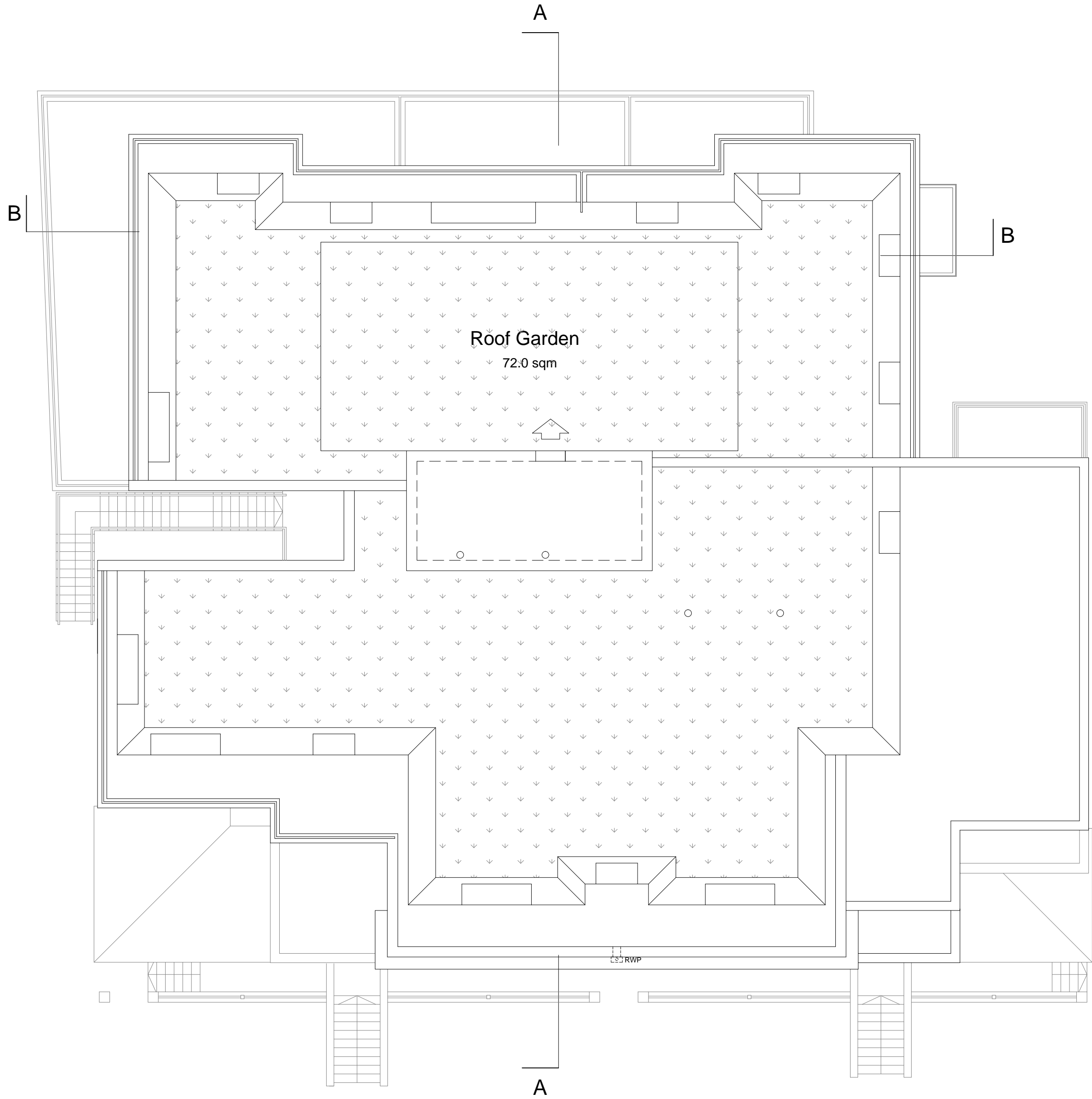
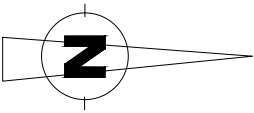
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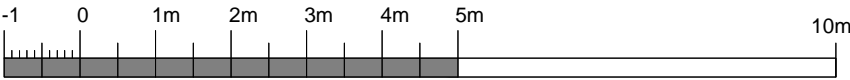
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PROJECT: 399 Tottenham High Road London N17 6QN											
SUBJECT: PROPOSED NORTH ELEVATION											
DRAWING NO: 311/19											
SCALE: 1:100 @ A2							DATE: JULY 2013				
DRAWN BY:		PT					CHECKED BY:  DA				
REV:	H	I	J	K	L	M	N	O	P	Q	R



Roof Plan



L	07-01-15	Section of third floor mansard omitted to north side extension
K	08-12-14	Mansard roof plan revised to align with third floor
J	26-11-14	Layout revised to incorporate planners comments
I	24-10-14	Balconies revised
H	17-10-14	Plan revised
G	08-09-14	Plan revised
F	29-08-14	Plan revised
E	15-07-14	Plan revised to planners requirements
D	08-07-14	Roof plan revised
C	02-06-14	Roof to stair/roof garden balustrade revised
B	23-05-14	Plan revised
REV	DATE	COMMENTS

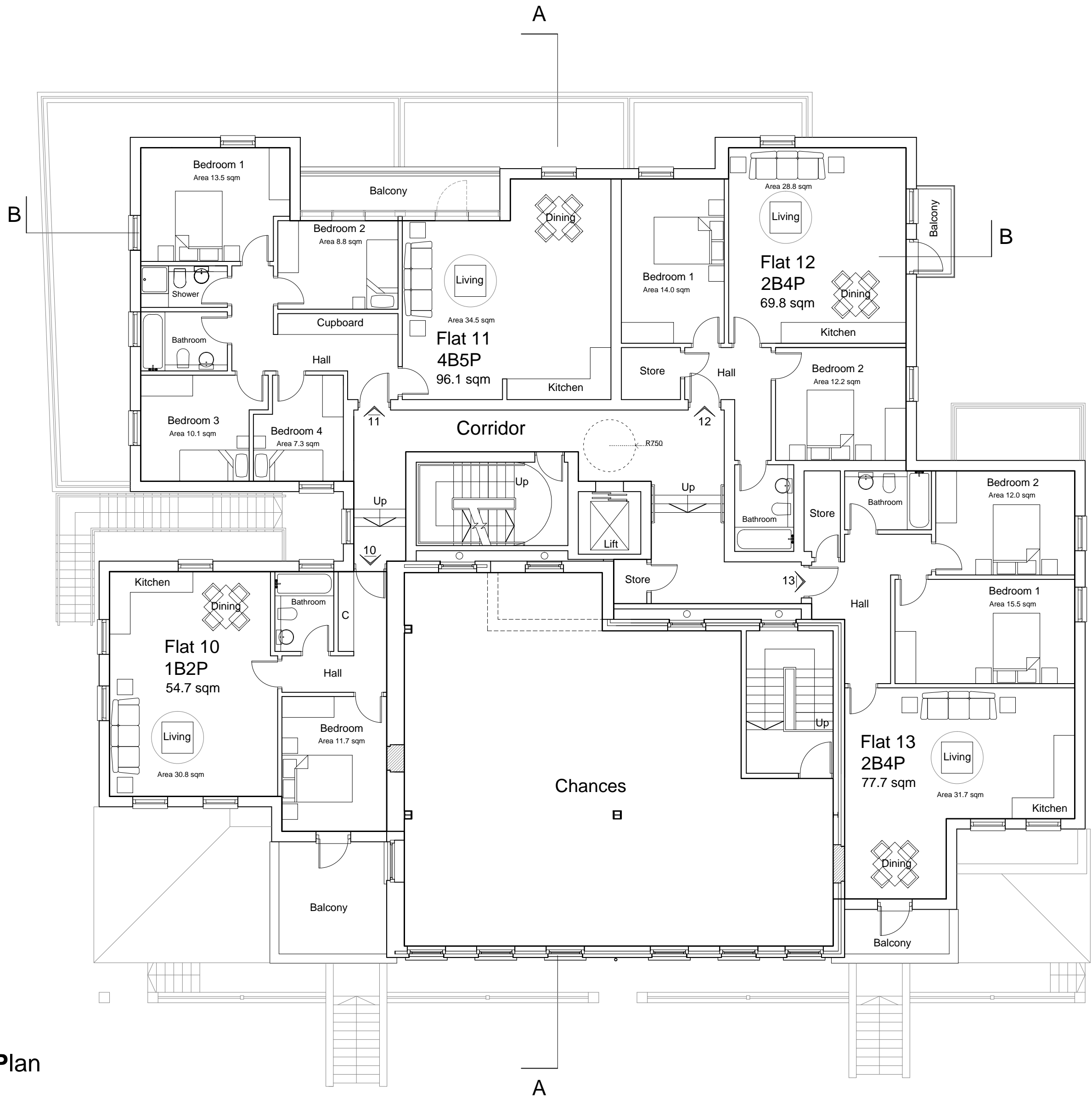
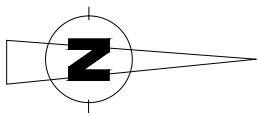
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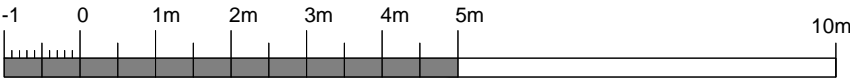
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Tel: 01787 477557  
E-mail: info@adaarchitects.org.uk  
Web: www.adaarchitects.co.uk

PROJECT:	399 Tottenham High Road London N17 6QN	
SUBJECT:	PROPOSED ROOF PLAN	
DRAWING NO:	311/24	
SCALE:	1:100 @ A2	DATE: JULY 2013
DRAWN BY:	PT	CHECKED BY:
		DA
REV:	B	C D E F G H I J K L



Second Floor Plan



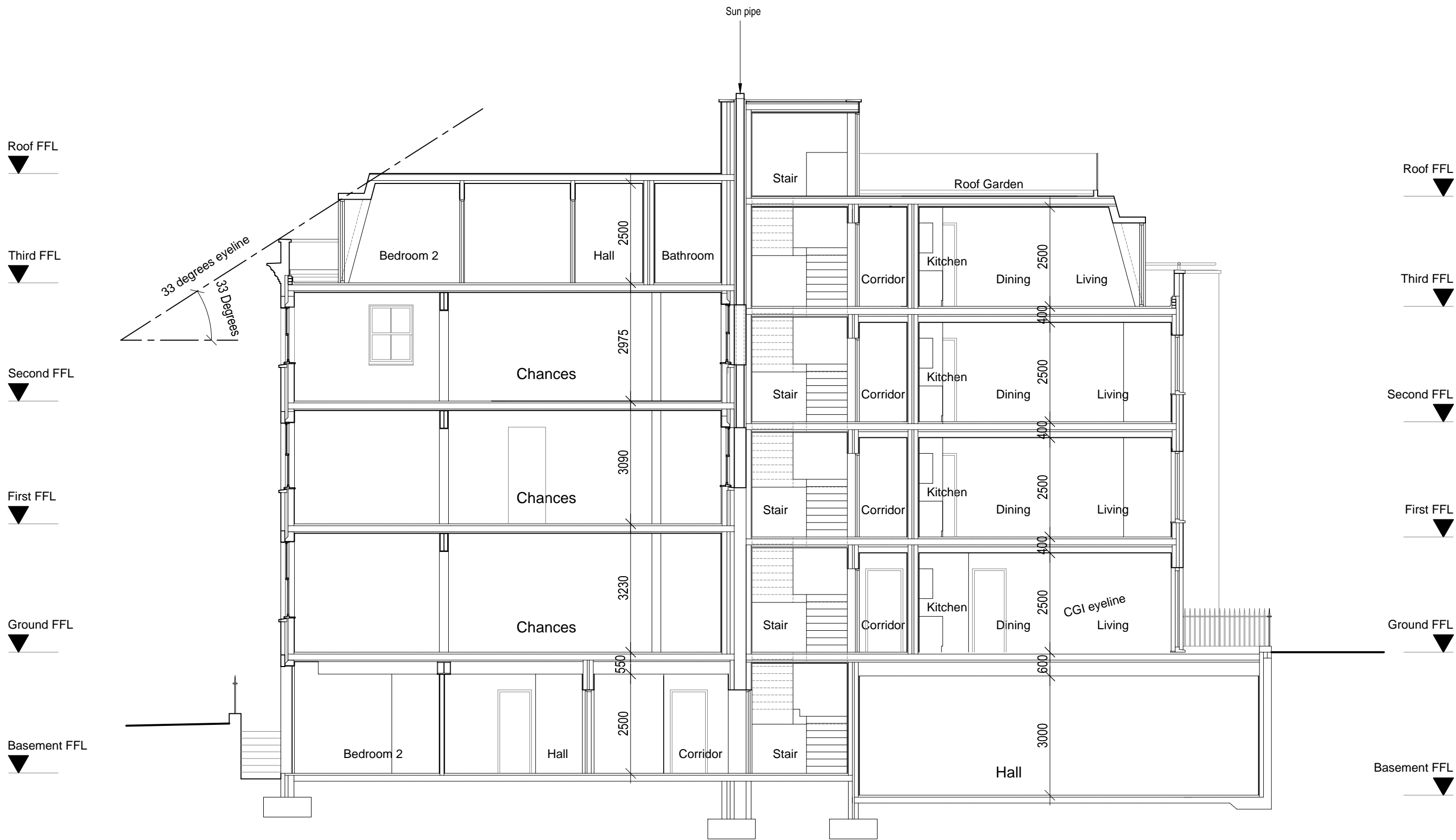
T	26-11-14	Layout revised to incorporate planners comments
S	24-10-14	Flat 12 revised
R	08-10-14	Layout revised
Q	08-09-14	Layout revised
P	18-08-14	Layout revised
O	18-07-14	Flats re-numbered
N	15-07-14	Plan revised to planners requirements
M	08-07-14	Flat added to north elevation
L	02-06-14	Balustrade revised
K	23-05-14	Plan revised
REV	DATE	COMMENTS

P L A N N I N G

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Web: www.adaarchitects.co.uk

PROJECT:	399 Tottenham High Road London N17 6QN
SUBJECT:	PROPOSED SECOND FLOOR PLAN
DRAWING NO:	311/15
SCALE:	1:100 @ A2
DATE:	JULY 2013
DRAWN BY:	PT
CHECKED BY:	DA
REV:	K L M N O P Q R S T





Section A-A

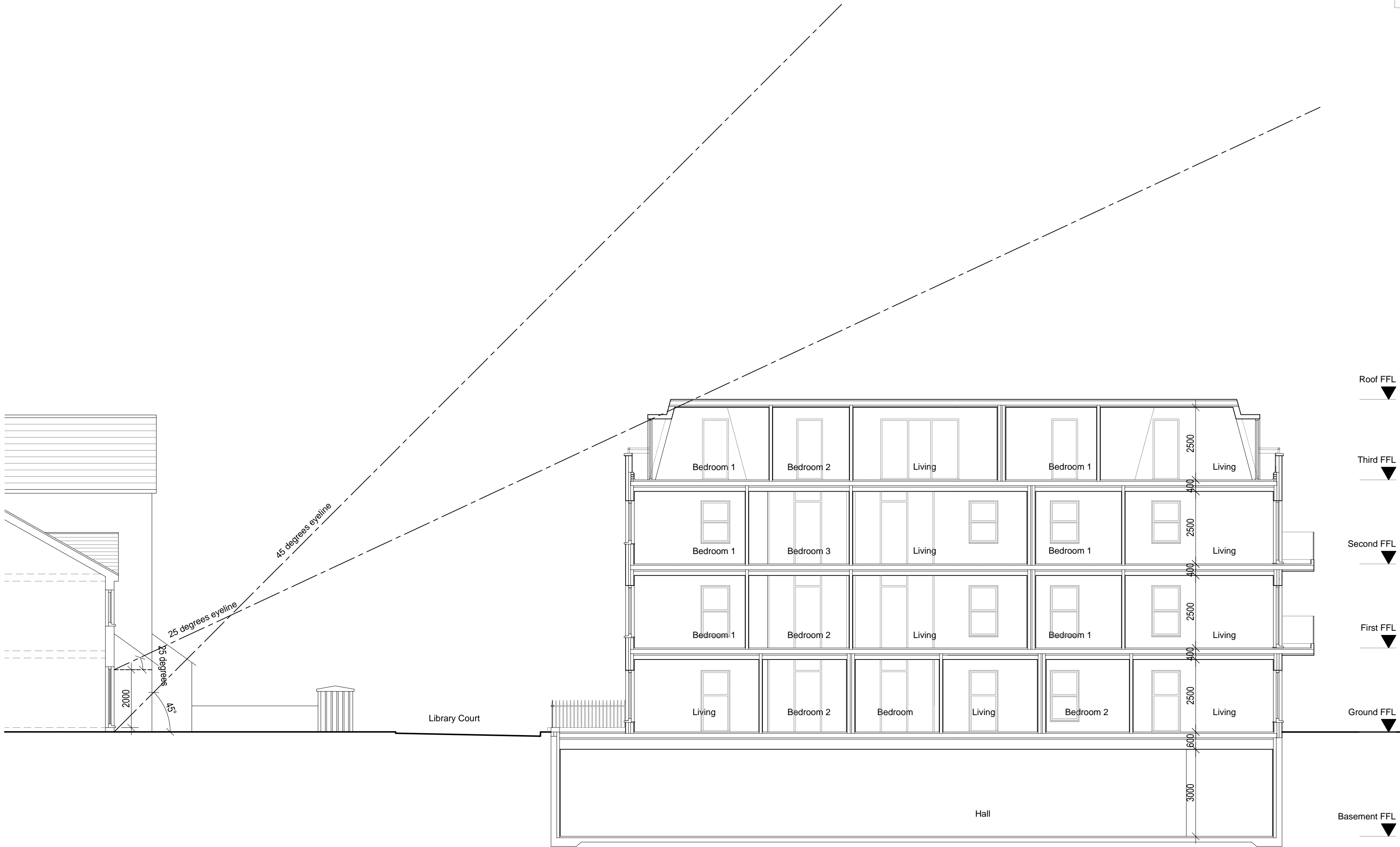
K	17-12-14	Mansard roof revised to front and rear
J	26-11-14	Section revised to incorporate planners comments
I	24-10-14	Third floor balcony revised
H	20-10-14	Section revised
G	08-09-14	Section revised
F	29-08-14	Section revised
E	16-07-14	Section revised to planners requirements
D	08-07-14	Fourth floor omitted
C	02-06-14	Ramps/windows/roof to stair revised
B	23-05-14	Section revised
REV	DATE	COMMENTS

P L A N N I N G

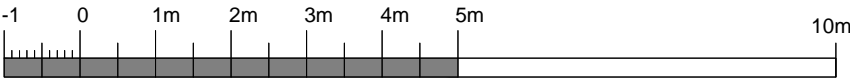
**ada** ARCHITECTS  
129 Kings Road  
Halestead  
Essex CO9 1HJ  
Tel: 01787 477557  
E-mail: info@adaarchitects.org.uk  
Web: www.adaarchitects.co.uk

PROJECT:	399 Tottenham High Road London N17 6QN
SUBJECT:	PROPOSED SECTION A-A
DRAWING NO:	311/22
SCALE:	1:100 @ A2
DATE:	JAN 2014
DRAWN BY:	WLH
CHECKED BY:	DA
REV:	B C D E F G H I J K

Do not scale this drawing.  
Dimensions to be taken on site and all discrepancies reported to the CA



Section B-B



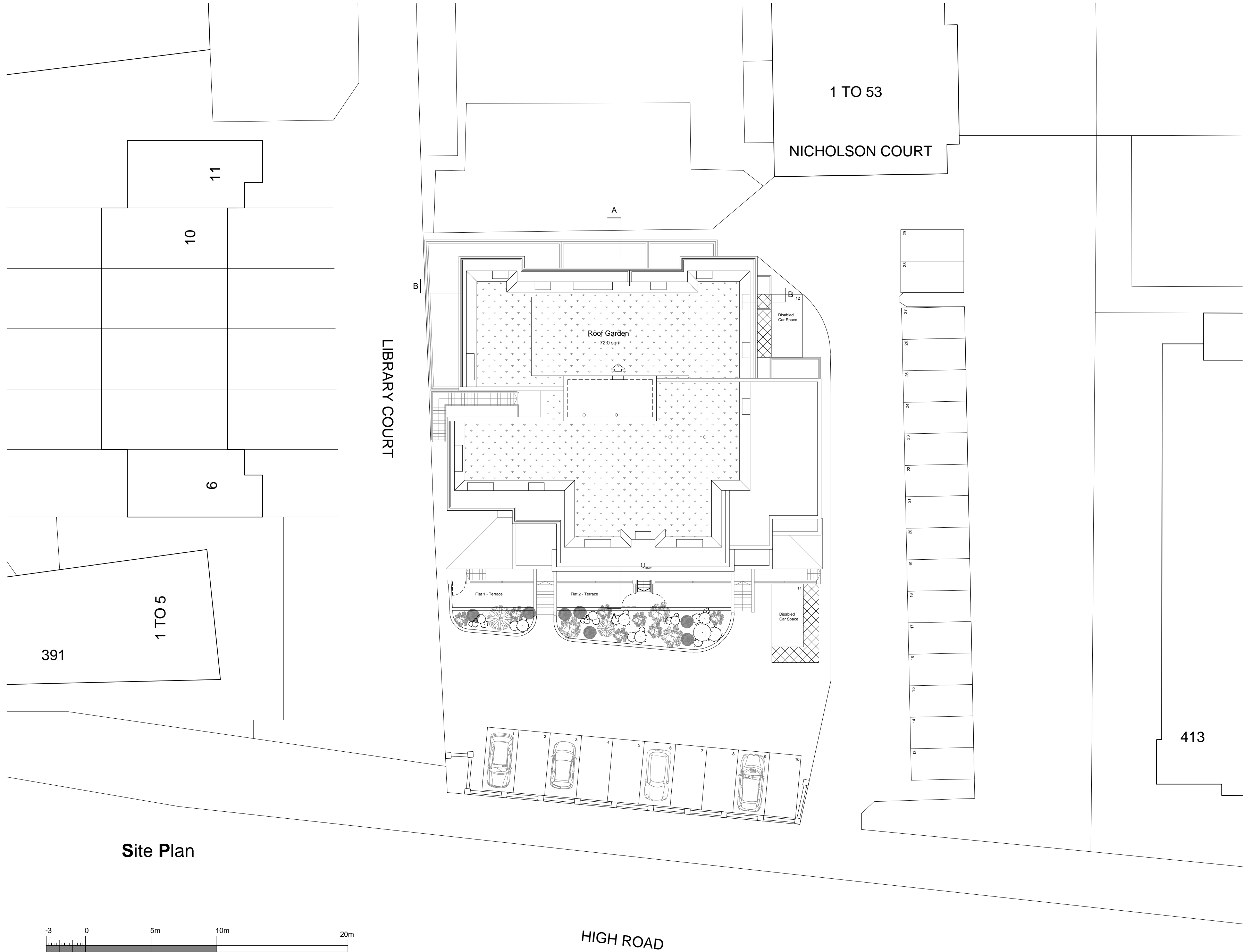
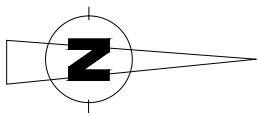
K	26-11-14	Section revised to incorporate planners comments
J	24-10-14	Third floor balcony revised
I	20-10-14	Section revised
H	08-09-14	Section revised
G	29-08-14	Section revised
F	18-07-14	Ground floor walls/room names revised
E	16-07-14	Section revised to planners requirements
D	08-07-14	Fourth floor omitted
C	02-06-14	Windows revised
B	23-05-14	Section revised
REV	DATE	COMMENTS

P L A N N I N G

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PROJECT:	399 Tottenham High Road London N17 6QN
SUBJECT:	PROPOSED SECTION B-B
DRAWING NO:	311/23
SCALE:	1:100 @ A2
DATE:	JAN 2014
DRAWN BY:	PT
CHECKED BY:	DA
REV:	B C D E F G H I J K

Do not scale this drawing.  
Dimensions to be taken on site and all discrepancies reported to the CA



Site Plan

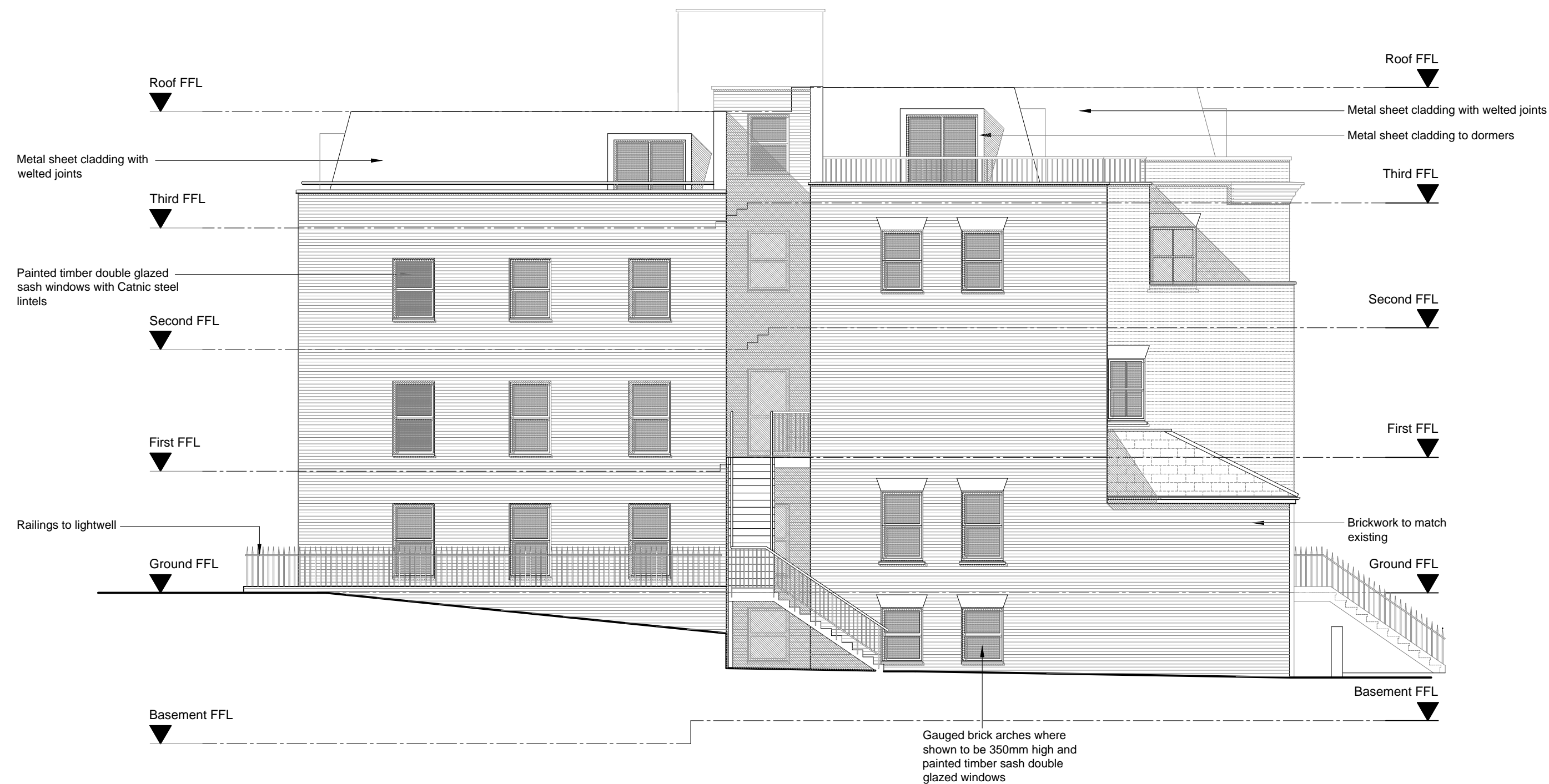
O	08-01-15	Section of third floor mansard omitted to north side extension
N	08-12-14	Mansard roof plan revised to align with third floor
M	26-11-14	Site layout revised to incorporate planners comments
L	13-10-14	Site layout revised
K	08-09-14	Site layout revised
J	29-08-14	Site layout revised
I	15-07-14	Plan revised to planners requirements
H	08-07-14	Car parking/roof plan revised
G	23-05-14	Site plan revised/notes added
REV	DATE	COMMENTS

P L A N N I N G

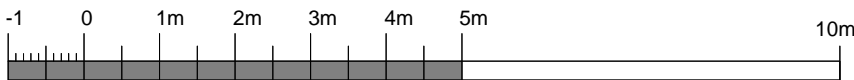
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PROJECT:	399 Tottenham High Road London N17 6QN												
SUBJECT:	PROPOSED SITE PLAN												
DRAWING NO:	311/11												
SCALE:	1:200 @ A2						DATE: JULY 2013						
DRAWN BY:	PT						CHECKED BY:						
							DA						
REV:	G	H	I	J	K	L	M	N	O				



South Elevation



H	26-11-14	Elevation revised to incorporate planners comments
G	24-10-14	Third floor balcony revised
F	20-10-14	Elevation revised
E	08-09-14	Elevation revised
D	29-08-14	Elevation revised
C	16-07-14	Elevation revised to planners requirements
B	08-07-14	Elevation revised to re-configured plans
A	02-06-14	Elevation revised
REV	DATE	COMMENTS

P L A N N I N G

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PROJECT:	399 Tottenham High Road London N17 6QN									
SUBJECT:	PROPOSED SOUTH ELEVATION									
DRAWING NO:	311/21									
SCALE:	1:100 @ A2					DATE:	JAN 2014			
DRAWN BY:	PT					CHECKED BY:	DA			
REV:	A	B	C	D	E	F	G	H		



Do not scale this drawing.  
Dimensions to be taken on site and all discrepancies reported to the CA



D	08-01-15	Section of third floor mansard omitted to north side extension
C	26-11-14	Elevation revised to incorporate planners comments
B	24-10-14	Brick window heads added
REV	DATE	COMMENTS

P L A N N I N G

ada

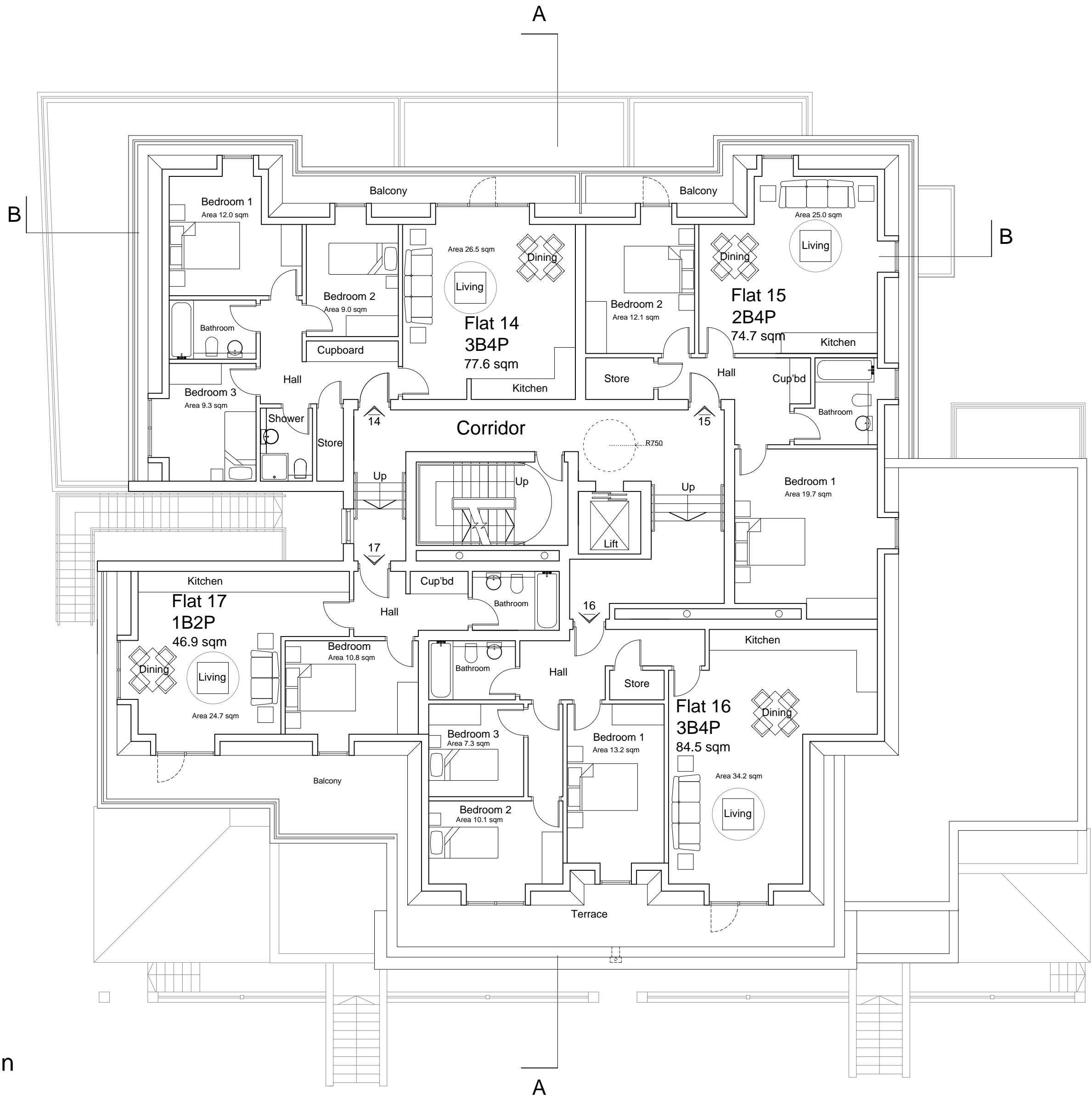
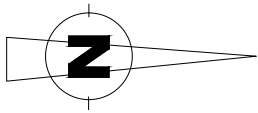
ARCHITECTS

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Halstead  
Essex CO9 1HJ  
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Web: www.adaarchitectsld.co.uk

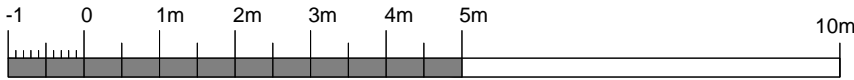
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SUBJECT: Tottenham High Road Elevation	
DRAWING NO: 311/50	
SCALE: 1:200 @ A2	DATE: August 2014
DRAWN BY: PT	CHECKED BY: DA
REV:	A B C D







Third Floor Plan



V	07-01-15	Flat omitted from north side/Flat 15 revised
U	08-12-14	Flat 16 - Wall to living aligned with Flat 18
T	26-11-14	Layout revised to incorporate planners comments
S	24-10-14	Balconies revised
R	08-10-14	Layout revised
Q	08-09-14	Layout revised
P	18-08-14	Layout revised
O	18-07-14	Flats renumbered/flat 19 bedroom added
N	15-07-14	Plan revised to planners requirements
M	08-07-14	Flat added to north elevation
L	02-06-14	Window revised n flat 18
K	23-05-14	Plan revised
REV	DATE	COMMENTS

P L A N N I N G

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PROJECT:		399 Tottenham High Road London N17 6QN									
SUBJECT:		PROPOSED THIRD FLOOR PLAN									
DRAWING NO:		311/16									
SCALE:		1:100 @ A2					DATE: JULY 2013				
DRAWN BY:		PT					CHECKED BY:  DA				
REV:	V										



West Elevation

K	07-01-15	Section of third floor mansard omitted to north side extension
J	17-12-14	Third railings added
I	26-11-14	Elevation revised to incorporate planners comments
H	31-10-14	First/second floor balconies revised
G	24-10-14	Third floor balconies revised
F	13-10-14	Elevation revised
E	08-09-14	Elevation revised
D	29-08-14	Elevation revised
C	16-07-14	Elevation revised to planners requirements
B	08-07-14	Elevation revised to re-configured plans
A	02-06-14	Elevation revised
REV	DATE	COMMENTS

P L A N N I N G

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E-mail: info@adaarchitects.org.uk  
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PROJECT:	399 Tottenham High Road London N17 6QN										
SUBJECT:	PROPOSED WEST ELEVATION										
DRAWING NO:	311/20										
SCALE:	1:100 @ A2					DATE: JAN 2014					
DRAWN BY:	PT					CHECKED BY:					
						DA					
REV:	A	B	C	D	E	F	G	H	I	J	K



**SECURE BY DESIGN STATEMENT**

**PROPOSED DEVELOPMENT**

**AT**

**399 – 401 High Road**

**Tottenham LONDON N17 6QN**

**10 February 2015**

## INTRODUCTION

This Secure by Design Statement has been prepared on behalf of Alto Property Investment Ltd. and forms part of the supporting documentation for the planning submission to Haringey Council for the project at 399-401 High Road, Tottenham, London E17 6QN.

## DOORS

1. Doorsets ( including front, patio/sliding and French) must be tested and certified to PAS 24 :2012 - or –

The following standards:

- STS 201 Issue 4:2012 or:
- STS 202 Issue 3:2011 BR 2
- LPS 1175 Issue 7:2010 SR 2

Suitably qualified and recognised third party Certification Authorities for the above standards are as follows:

For PAS 24, PAS 23 & BS 6375:

- British Standards Institute (BSI)
- BM TRADA Certification
- British Board of Agreement (BBA)
- BRE Certification
- Build Check Certification
- ER Certification
- UL International (UK)

For STS 201 & 202:

- Warrington Certification

For LPS 1175

- Loss Prevention Certification Board (Note the LPCB is part of the Building Research Establishment (BRE))

2. The DOCO must be supplied with proof of certification including the technical schedule (sometimes referred to as 'Scope of Certification') prior to the SBD certificate being awarded, unless the supplier is a member of the Secured by Design Licensing Scheme and the doorset can be identified on the SBD website.

Communal doorsets should be tested and certified to LPS 1175 Issue 7:2010 SR 2

3. Internal door release system- THAT HAS A MANUAL DOOR RELEASE OVERRIDE BUTTON IS NOT USED FOR COMMUNAL SPACE (APARTMENTS) - UNLESS IT HAS AN AUTOMATIC 'RESET' TIME LIMIT OF NO MORE THAN A FEW MINUTES! An example of good practice is the NACD - EM24EX EMERGENCY EXIT SYSTEM. PLEASE DISCUSS THIS WITH THE DOCO AT YOUR EARLIEST OPPORTUNITY IF NEEDED.

## **COMMUNAL DWELLINGS**

1. Electro magnetic locks are acceptable on communal doors. These should be fitted to the top and bottom of the door with a minimum force lb setting of 1200 lbs per individual lock
2. All communal developments with communal access/egress doors are fitted with a secondary access/egress door of the same SBD standard that is controlled by the legitimate user. This will create a 'controlled vacuum' that will be difficult to 'tailgate' through.
3. There are more than 8 flats accessed from a single entrance and a video entry system will be required.
4. No Trades Buttons.
5. Letterboxes either in individual doors or in a bank in lobby (not outside through wall).
6. All FOB access should be encrypted cards such as those manufactured by Phillips- called myfair desfire smartcards- for all access control fobs or cards these are similar to those manufactured for Tube Oyster cards and are encrypted and can't be copied. These cards cost about the same as the HID cards.
- 7.

## **FLAT ENTRANCE DOORSETS SERVED OFF SHARED CORRIDOR OR STAIRWAY**

1. Flat entrance doorsets shall meet the same physical specification as 'front door'

## **WINDOWS**

All windows must incorporate key lockable hardware unless designated as emergency egress routes. Windows installed within SBD developments must be certificated by one of the following UKAS accredited certification bodies or can demonstrate alternative compliance:

- British Standards Institute
- BM TRADA Certification
- British Board of Agrément
- BRE Certification Board
- Steel Window Association
- ER Certification
- Warrington Certification (STS 204)
- UL International (UK)

All ground floor and accessible glass panels to be fitted with the below mentioned laminate glass -This includes glass that can be reached by climbing any number of floors via down pipes or balconies or via communal walkways -whether access to this area is via a secured door or not-Any area which has a handhold within 3m from the ground is considered vulnerable.

1. Laminated glass should be tested to BS EN 356:2000 class P1A
2. Vulnerable windows will require secure, lockable window restrictors.  
These should be considered carefully as the requirements may conflict with provision of escape windows.
3. The SBD standards for ground floor, basement and easily accessible windows are as follows:
  - PAS 24:2012 - or -
  - STS 204 Issue 3: 2012



4. AOV:

The design should avoid the need for Automatic Opening Vents at ground floor level or other accessible positions. If unavoidable then additional security will be required e.g. internal grille **(N.H.2012 p55)**

5. Disabled Flats: The room layouts should provide sufficient opening windows that are easily reachable to avoid the need for remote window openers as these are generally not tested and do not activate the inbuilt window locking mechanism. If this cannot be avoided then internal grilles may be required to be fitted to the windows.

## ROOFLIGHTS

1. Easily accessible roof light apertures shall be protected by roof lights certified to:

- PAS 24:2012 (*Note 28.1.2 and 28.1.2*), or
- STS 204 Issue 3:2012, or
- LPS 1175 Issue 7:2010 Security rating 1,  
or
- STS 202 Issue 3:2011 Burglary rating 1,  
or
- LPS 2081 Issue 1:2014 Security rating A

Easily accessible roof lights shall be glazed with laminated glass. The above requirement is not required within roof lights certificated to LPS 1175 SR1 or STS 202 BR1 as glazing security is suitably addressed within these standards.

## DWELLING SECURITY LIGHTING

1. Lighting should meet the requirements of BS 5489-2013.
2. All external lighting to be photo-electric/dusk to dawn
3. Internal lighting same unless no natural light in corridor in which case 50/50 scheme photo electric and detector
4. A full external lighting design will be required as part of the SBD submission.
5. There is SBD guidance on the lux levels required, but the emphasis is on uniformity of lighting across the site.
6. Recessed entrances should be limited to 600mm maximum.

## INTRUDER ALARMS

1. A 13 amp non switched fused spur, suitable for an alarm system, must be installed. If the full alarm system is installed it shall comply with one of the following standards:
  - BS EN 50131 & PD6662 (wired system)
  - BS 6799 (wire free system)All installations should be in accordance with the current regulations for electrical installations.
2. If complete systems are installed, and a police response is required, reference shall be made to the ACPO Security Systems Policy a copy of which can be obtained from the SBD

website – [www.securedbydesign.com](http://www.securedbydesign.com)

## **UTILITIES**

1. Utility meters are to be located outside dwellings in a communal area such as an entrance lobby.
2. Intelligent meters with automatic signalling are an acceptable alternative.

## **PARTY WALL CONSTRUCTION AND SOUND INSULATION**

1. Although not originally intended to enhance security the following 'Robust Details' are acceptable:
  - E-WT-2 (timber wall construction)
  - E-WS-3 (light steel construction)
  - E-WM-20 (masonry wall construction)Alternatively walls proven to meet the requirements of the following standards are also acceptable:
  - LPS 1175 Issue 7:2010 Security Rating 1, or
  - STS 202 Issue 3:2011 Burglary rating 1

## **INTERNAL COMMUNAL BIN & BICYCLE STORAGE**

1. Bin/maintenance/cycle stores will require SBD certified doors. If they are louvred, mesh will be required behind.
2. All cycle parking within 'basement area' needs to be within a suitable secure locker/storage area.

## **EXTERNAL AREAS**

1. All low defensive wall/railings to be designed so they can not be sat upon.
2. Any walls to vulnerable areas (gardens etc) with metal railings on top need to have railings with spacings no greater than 50mm in width.
3. All rear/vulnerable boundary walls/fences to be 2.4m high.
4. All down pipes are designed to a 'square' shape and fitted with no gaps against the wall to reduce climbing opportunities- Alternatively can be fitted within a wall recess so that they are flush with the wall.
5. The gates should be min. 2.4m high and be of an anti-climb design.
6. Full landscaping scheme including all proposed species should be submitted as part of the SBD submission
7. Generally, visibility should be aided by restricting ground cover to 1m high and choosing species of trees with a canopy which starts above 2m, giving a 1m zone across the site for visibility.

## **CAR PARKING**

12 no. car parking spaces are provided at the front of the building including 2 no. disabled parking spaces with good visibility from the dwellings.

# Statement of Community Involvement & Public Consultation



399 High Road,  
Tottenham  
N17 6QN

Tottenham War Services Institute  
Charity Commission No. 217176  
Contact: 399 High Road, Tottenham, N17 6QN  
Tel: 0208 365 0653

The TWSI (Tottenham War Services Institute) are committed to the provision of a programme of Community support in Tottenham.

This support ranges from encouraging community projects such as seed swap and the growing project to survivors poetry and provision of space for a mental health support programme.

The Charity actively assists in supporting homeless persons back into accommodation.

The centre often provides space to young entrepreneurs from the local area to assist them in their endeavours in the forums of arts, drama, music, dance, theatre and film.

To this end, the development of the site will allow us to continue and improve our work.

As a Community facility we are committed to involving and consulting with local people and facility users in our development plans. Throughout the process we have listened to the views of stakeholders and of local people.

This ongoing consultation throughout the course of the planning process has helped to shape the scope of the project from the ground upwards.

The TWSI approach to Community Involvement and Public Consultation has been guided by The London Borough of Haringeys own Statement of Community Involvement, which was adopted in May 2007 and updated in February 2011.

## **Early Consultation before Submission**

### *Public Meeting with Displays*

On Sunday the 30<sup>th</sup> March 2014 an open day was held at T'Chances, 399 High Road, Tottenham, N17 6QN.

The Open Day had been widely publicized to:

All facility users by word of mouth and personal invitation.

A banner displayed on the building advertising the event to passers by, both on foot and particularly by bus. The properties prominence on the High Road ensured that the event was widely broadcast.

and

Personal written invitation to 200 plus local people who have at any point had something to do with community events and facilities in Tottenham.



The Open Day was a fundraiser for the facility and included as part of the days activities a full display of the proposals for development, with large scale drawings, handouts and a question and answer session with the architect, as well as one to one discussions.

A Question and Answer Session with the Architect David Alton of ADA architects Halstead, Essex was held.

Mr Alton was on hand from 9 am – 3pm to meet and discuss with any member of the public or local community group the architectural benefits of the development.

The plans were displayed and available for viewing for two weeks following the date of the open day.

Those attending included representatives of several local community groups including but not limited to; 'We Love Tottenham', Efiom Arts, All About Tottenham etc.

Brief Presentation with a Question and Answer Session at the April meeting of Tottenham Future.

Scheme drawings were displayed and Trustees were available on the evening of the meeting for discussion.

### *Pre-planning Process*

From the outset, the developer, Alto Properties Ltd and the TWSI have been fully engaged in the pre-planning process.

There were 5 pre-planning meetings on the:

1. 20<sup>th</sup> March 2014
2. 15<sup>th</sup> April 2014
3. 9<sup>th</sup> July 2014
4. 11<sup>th</sup> September 2014
5. 13<sup>th</sup> November 2014

At each meeting, advice was sought and design solutions discussed. Following each meeting, suggestions were presented informally to the planning team including:

Planning Lead - John McRory

Planning Officer – Robbie McNaugher

Design Officer - Richard Truscott

Conservation Officer - Nairita Chakroborty

Each and every piece of feedback was, if practical fed into the design of the building, specifically in relation to both internal layout and external appearance.

As part of the pre-planning process, the developer / applicants design team attended the Design Forum.

Comments were listened to and were fed into the melting pot of design.

#### *Housing:*

One to one discussions were held with Sandra Lawrence from the Haringey Housing Dept. As affordable housing is a 'hot potato' in the East of Haringey, advice was sought as to the Councils working policy for affordable housing in this area. This consultation was vital when taken in context with the results of our public consultation where social housing was high on the list of concerns of local interest groups. Examples being

#### *Heritage:*

Given the importance of the position and age of the building, particular attention was placed on consultation with our heritage expert Elizabeth Moore, who for 18 years worked as an historic buildings architect for the English Heritage.

## **Consultation Findings**

1. Loss of amenity
2. Provision of real affordable housing
3. Concern over noise
4. Appearance

## **Actions based on Consultation:**

### *1. Loss of amenity...*

Whilst the new design for the building seeks to retain as much Community space as possible, there was always the possibility that some Community space would be lost. To negate this, the TWSI took a lease on the upper parts of the building (of which they are freeholders) to create a net increase in available Community space.

### *2. Provision of real affordable housing...*

The term 'real affordable housing' is one that was used repeatedly in the feedback from local interest groups. There is a real concern that affordable housing is now only attainable by those on mid range incomes from £30,000 upwards. The remit of the TWSI is to work for

*THE BENEFIT AND GENERAL WELFARE OF EX-SERVICE PERSONNEL OVER 50 YEARS OF AGE, THEIR FAMILIES AND DEPENDANTS, AND FOR SUCH OTHER CHARITABLE PURPOSES AS THE MANAGING TRUSTEES FROM TIME TO TIME THINK FIT.*

To this end, the properties that will be retained by the Charity after completion will be used to support our stated charitable aims.

### *3. Subterranean rear hall for music events ...*

Hall re-located from the front to the rear of the building and built into the substructure for purposes of noise insulation and energy efficiency. This negates the concern over noise and the juxtaposition of residential apartments with a licensed premises.

### *4. Appearance ...*

Over the course of the pre-application / public consultation period, there have been many suggestions put forward as to the appearance of the building, specifically with regards to the views directly from the High Road. The adage that you cannot please all of the people all of the time is directly relevant to this point. Having taken into



account public consultation comments, officer opinion and historical documentation, and married this to the very valid opinion of the Trustees of the TWSI that following the fire in 1985 and the poor quality re-build, that the exterior of the building should relate to its original heritage, the applicant has listened to the very experienced voice of the heritage consultant with the result being a proposal that will sit comfortably at the gateway to a regenerated Tottenham.

# Tottenham High Road Area Weighted Calcs

Plot	Floor Area	TER	DER	% Reduction
				In CO2
3	60.5	18.7	10.37	44.545
4	36.4	20.68	6.36	69.246
5	61.4	18.73	10.32	44.901
6	55.8	23.69	15.13	36.133
7	95.7	14.9	10.29	30.940
8	69.8	16.1	9.17	43.043
9	82.1	17.6	11.54	34.432
10	54.7	23.86	13.47	43.546
11	96.1	16.83	11.3	32.858
12	69.8	18.02	10.16	43.618
13	77.7	20.13	13.04	35.221
14	77.6	20.39	13.29	34.821
15	74.7	20.96	13.41	36.021
16	84.5	20.8	13.71	34.087
17	46.9	23.92	12.12	49.331
Total	1043.7	Average		40.850
Average Floor Area	69.58			

**PROPOSED RESIDENTIAL DEVELOPMENT  
399 HIGH ROAD, TOTTENHAM, LONDON**

Alto Properties Investment Limited  
Transport Statement

**January 2014**

**Alto Properties Investment Limited  
Proposed Residential Extension  
399 High Road, Tottenham**

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<b>2.0</b>	<b>TRANSPORT CONTEXT</b>	<b>6</b>
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## 1.0 INTRODUCTION

### 1.1 Appointment of Connect Consultants Limited

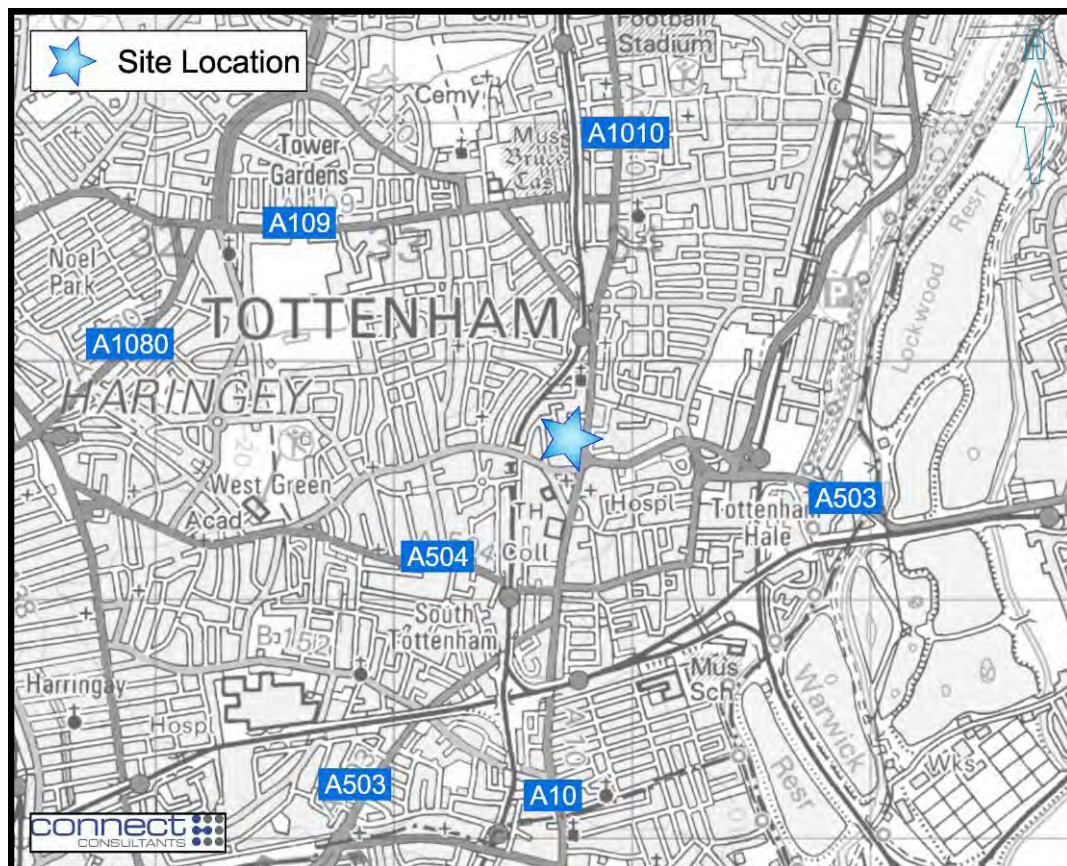
1.1.1 Connect Consultants Limited is a firm of specialist highways, traffic and transportation planning consultants that have been instructed by Alto Properties Investment Limited in respect of their planning application for a residential extension at 399 High Road, Tottenham.

### 1.2 Location of Proposal Site

1.2.1 The development site is bound by A10 High Road on its eastern boundary, Library Court on its southern boundary, Christ Apostolic Church Outreach District HQ on its northern boundary and residences on its western boundary.

1.2.2 The proposal site is located immediately to the south of retail and employment uses, adjacent to a number of bus stops and in close proximity to Bruce Grove Railway Station and Seven Sisters Underground Station. The site's location is identified at **Inset 1.1** below.

**Inset 1.1 – Location of Proposal Site**





### 1.3 Background

- 1.3.1 The proposal site currently operates as a youth centre on its basement and ground floors, and an office on its first and second floors. The existing building has associated parking for approximately eight cars.

### 1.4 Development Proposals

- 1.4.1 **Appendix 1** contains a drawing indicating the existing site layout and **Appendix 2** contains a drawing indicating the proposed site layout. The main components of the development scheme are as follows:

- An extension to the existing 399 High Road building to include 23 residential units comprising nineteen 1-bedroom units and four 2-bedroom units.
- It is not proposed to provide any additional on-site parking with the existing parking remaining associated with the site's existing uses.

### 1.5 Planning Policy

- 1.5.1 This section of the report provides an overview of strategic planning policy at National and London level.

#### National Planning Policy Framework (NPPF)

- 1.5.2 The National Planning Policy Framework (NPPF) published on the 27<sup>th</sup> March 2012, sets out the Government's planning policies for England and sets out a framework for local authorities to produce their own local plans.

- 1.5.3 Paragraph 32 of the NPPF is provided below:-

*"All developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment. Plans and decisions should take account of whether:*

- *The opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;*
- *Safe and suitable access to the site can be achieved for all people; and*
- *Improvements can be undertaken within the transport network that cost effectively limits the significant impacts of the development. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe."*

The London Plan (July 2011)

- 1.5.4 The London Plan published in July 2011, sets out the London Mayor's spatial strategy for the boroughs of London, and provides detailed guidance for the structure of local borough plans.
- 1.5.5 Chapter 6 of the London Plan provides transportation context for London providing 15 transport specific policies at 6.1 through 6.15, some of which are provided below.
- 1.5.6 Policy 6.1 of the London Plan provides the strategic context for the plan, as set out below.

*"POLICY 6.1 STRATEGIC APPROACH*

*Strategic*

- A The Mayor will work with all relevant partners to encourage the closer integration of transport and development through the schemes and proposals shown in Table 6.1 and by:
  - a encouraging patterns and nodes of development that reduce the need to travel, especially by car – boroughs should use the standards set out in Table 6.2 in the Parking Addendum to this chapter to set maximum car parking standards in DPDs*
  - ...*
  - g supporting measures that encourage shifts to more sustainable modes and appropriate demand management..."**

- 1.5.7 Policy 6.3 of the London Plan provides the context for assessing the traffic impact of developments, as set out below.

*"POLICY 6.3 ASSESSING EFFECTS OF DEVELOPMENT ON TRANSPORT CAPACITY*

*Planning decisions*

- A Development proposals should ensure that impacts on transport capacity and the transport network, at both a corridor and local level, are fully assessed. Development should not adversely affect safety on the transport network.*
- B Where existing transport capacity is insufficient to allow for the travel generated by proposed developments, and no firm plans exist for an increase in capacity to cater for this, boroughs should ensure that development proposals are phased until it is known these requirements can be met, otherwise they may be refused. The cumulative impacts of development on transport requirements must be taken into account.*
- C Transport assessments will be required in accordance with TfL's Transport Assessment Best Practice Guidance for major planning applications. Workplace and/or residential travel plans should be provided for planning applications exceeding the thresholds in, and produced in accordance with, the relevant TfL guidance. Construction logistics plans and delivery and servicing plans should be secured in line with the London Freight Plan and should be co-ordinated with travel plans...."*

1.5.8 Policy 6.9 of the London Plan provides the cycling context for the plan, as set out below.

*"POLICY 6.9 CYCLING*

*Strategic*

*A The Mayor will work with all relevant partners to bring about a significant increase in cycling in London, so that it accounts for at least 5 per cent of modal share by 2026. He will:*

- a identify, promote and complete the Cycle Super Highways shown on Map 6.2*
- b implement the central London cycle hire scheme and identify potential sites for expansion and/or additional stand alone schemes in outer London.*

*Planning decisions*

*B Developments should:*

- a provide secure, integrated and accessible cycle parking facilities in line with the minimum standards set out in Table 6.3*
- b provide on-site changing facilities and showers for cyclists*
- c facilitate the Cycle Super Highways shown on Map 6.2*
- d facilitate the central London cycle hire scheme..."*

1.5.9 Policy 6.10 of the London Plan provides the walking context for the plan, as set out below.

*"POLICY 6.10 WALKING*

*Strategic*

*A The Mayor will work with all relevant partners to bring about a significant increase in walking in London, by emphasizing the quality of the pedestrian and street environment, including the use of shared space principles – promoting simplified streetscape, decluttering and access for all.*

*Planning decisions*

*B Development proposals should ensure high quality pedestrian environments and emphasise the quality of the pedestrian and street space...."*

1.5.10 Policy 6.12 of the London Plan provides the road network capacity context for the plan, as set out below.

*"POLICY 6.12 ROAD NETWORK CAPACITY*

*Strategic*

*A The Mayor supports the need for limited improvements to London's road network, whether in improving or extending existing capacity, or providing new links, to address clearly identified significant strategic or local needs.*

### *Planning decisions*

- B In assessing proposals for increasing road capacity, including new roads, the following criteria should be taken into account:*
- a the contribution to London's sustainable development and regeneration including improved connectivity*
  - b the extent of any additional traffic and any effects it may have on the locality, and the extent to which congestion is reduced*
  - c how net benefit to London's environment can be provided*
  - d how conditions for pedestrians, cyclists, public transport users, freight and local residents can be improved*
  - e how safety for all is improved.*
- C Proposals should show, overall, a net benefit across these criteria when taken as a whole. All proposals must show how any dis-benefits will be mitigated."*

## **1.6 Report Overview**

- 1.6.1 This Transport Statement (TS) has been prepared in accordance with the Department for Transport's guidelines entitled 'Guidance on Transport Assessment' along with the Transport for London's April 2010 document entitled 'Transport Assessment Best Practice Guidance'.
- 1.6.2 Threshold set out at Appendix B of the Guidance on Transport Assessment suggests that, for a proposed development of fewer than 50 dwellings (Use Class C3), no assessment is usually necessary; however in order to be thorough, a TS has been prepared. The remainder of this report is divided into four further sections, details of which are set out below.

### **SECTION 2.0 Transport Context**

This provides details of the existing transport infrastructure in the vicinity of the site and identifies the level of accessibility of the site by available travel modes, as well as reviewing the accessibility of local facilities, the site's PTAL score and 2011 census data for travel to work and car ownership.

### **SECTION 3.0 Proposed Site Access Arrangements & Parking Provision**

This provides details of the site layout and for the proposed vehicle and pedestrian site access arrangements and parking provision.

### **SECTION 4.0 Traffic Data**

This provides an assessment of the proposed development trip generation.

### **SECTION 5.0 Summary and Conclusions**

A summary of the report contents and the TS conclusions are provided in this final section of the report.

## 2.0 TRANSPORT CONTEXT

### 2.1 Introduction

- 2.1.1 This section of the report provides details of the transport context for the site, focusing on the accessibility of the site by non-car modes of transport and the existing transport infrastructure. Also included are details of local facilities residents are likely to access on a regular basis, a PTAL assessment and a review of 2011 census data for method of travel to work and car ownership.

### 2.2 Access by Foot

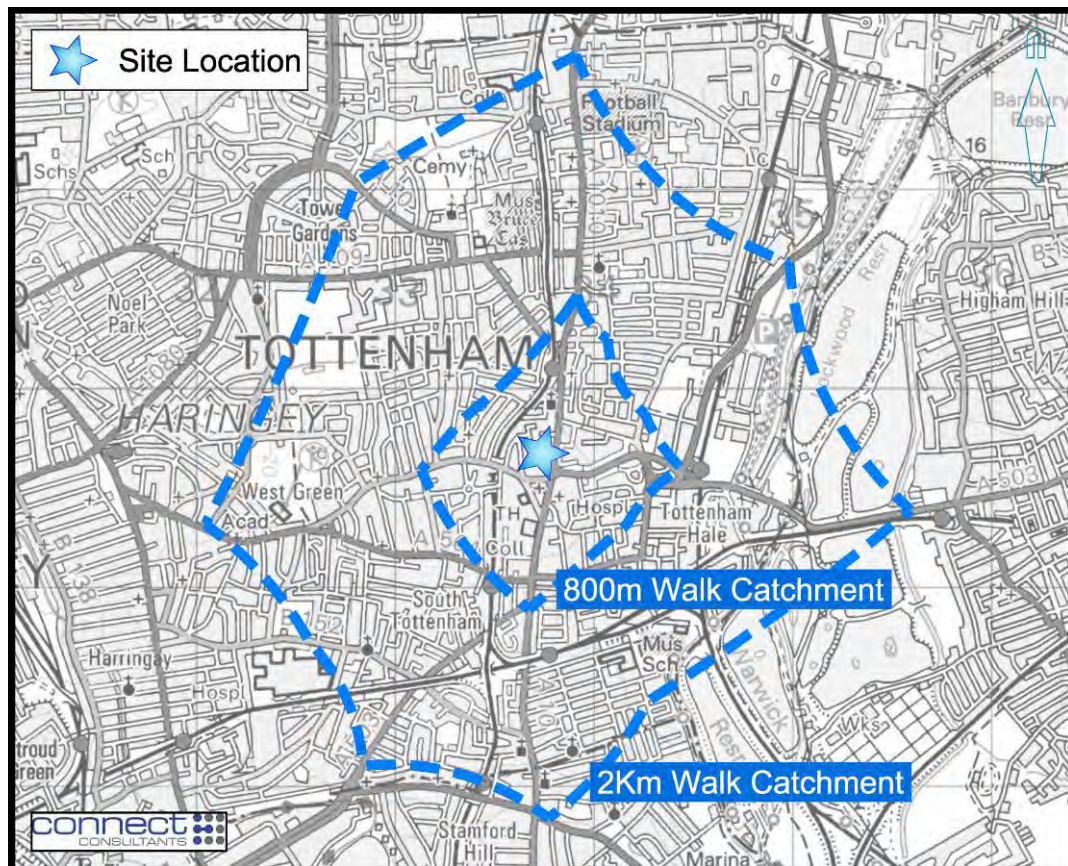
- 2.2.1 The Department for Transport's (DfT) document entitled 'Manual for Streets' dated 2007 at Sections 4.4 sets out the requirements for pedestrians stating:-

*"Walkable neighbourhoods are typically characterised by having a range of facilities within 10 minutes' (up to about 800 m) walking distance of residential areas which residents may access comfortably on foot".*

- 2.2.2 Paragraph 6.3.1 of the Department for Transport (DfT) document 'Manual for Streets' (2007) identifies that a 20 minute walk time (equivalent to a 1.6km walk distance) is acceptable subject to an attractive walking environment.
- 2.2.3 Table 3.2 of the Institute of Highways and Transportation (IHT) document 'Providing for Journeys on Foot' sets out acceptable maximum walk distances of, 2km for commuting and school journeys, 800m for Town Centres, and 1.2km for elsewhere. **Inset 2.1** highlights the 2km and 800m walk isochrones.



### Inset 2.1 – 800m and 2km Walk Catchments



- 2.2.4 **Inset 2.1** shows a large urban area within walk distance of the site and 2011 census data for travel to work for the surrounding population, as set out at **Graph 2.1** below, indicates 7% of employed people travelling by foot to/from work.
- 2.2.5 The site is located within a short walk distance of employment/retail facilities running along the A10 High Road. There are foodstores, pubs, restaurants, bars, shops, takeaways, banks, bookmakers, a police station, schools, a library, a leisure centre, a pharmacy, a medical centre and Tottenham Hale Retail Park are all within 800m walking distance of the site.
- 2.2.6 There are signalised pedestrian crossing facilities within close proximity of the site at the following locations:
- Approximately 60m, 250m and 600m to the north of the site along A10 High Road.
  - Approximately 80m to the south of the site at the A10 High Road / A1055 Monument Way signal junction.
  - Approximately 100m to the south of the site at the A10 High Road / B153 Philip Lane signal junction.
  - Approximately 400m to the south of the site at the A10 High Road / Town Hall Approach Road signal junction.
  - Approximately 500m to the south of the site along A10 High Road.

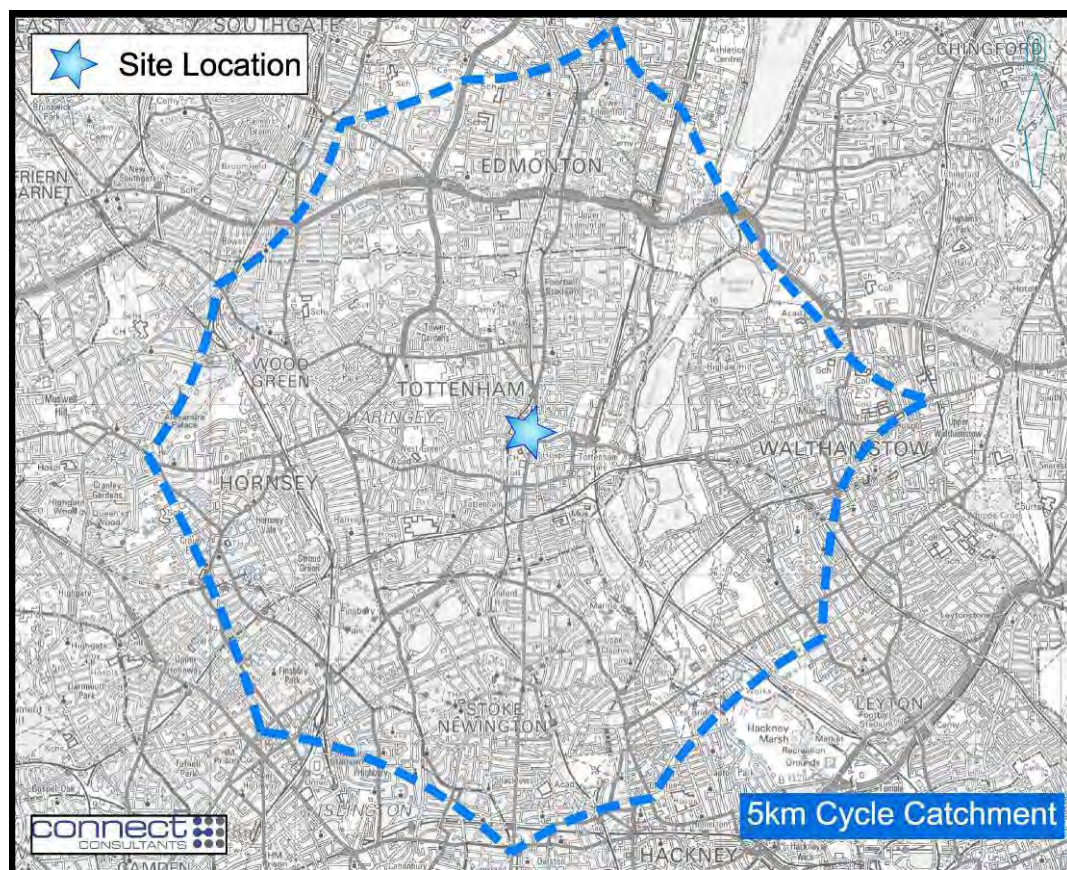


- 2.2.7 Down Lane Park is approximately 700m from the site, Bruce Castle Park is approximately 1km from the site and Lordship Recreational Ground is approximately 1.6km walk from the site. White Hart Lane is approximately 1.2km walk from the site.
- 2.2.8 Overall, the site is readily accessible by foot with a large number of varying facilities within walk distance of the site.

## 2.3 Access by Cycle

- 2.3.1 Sustrans indicate in their 'Travel Behaviour Research Baseline Survey – 2004' under the subheading 'measuring the potential for change' that cycling offers an alternative to car travel, and particularly for trips of less than 6 kilometres. This research is supported by the 2011 National Travel Survey, which specified average journey lengths, by cycle, of 4.8km ( $\approx 5$ km).
- 2.3.2 Assuming a five kilometre maximum cycle distance, the catchment area of the site by cycle is shown at **Inset 2.2** below.

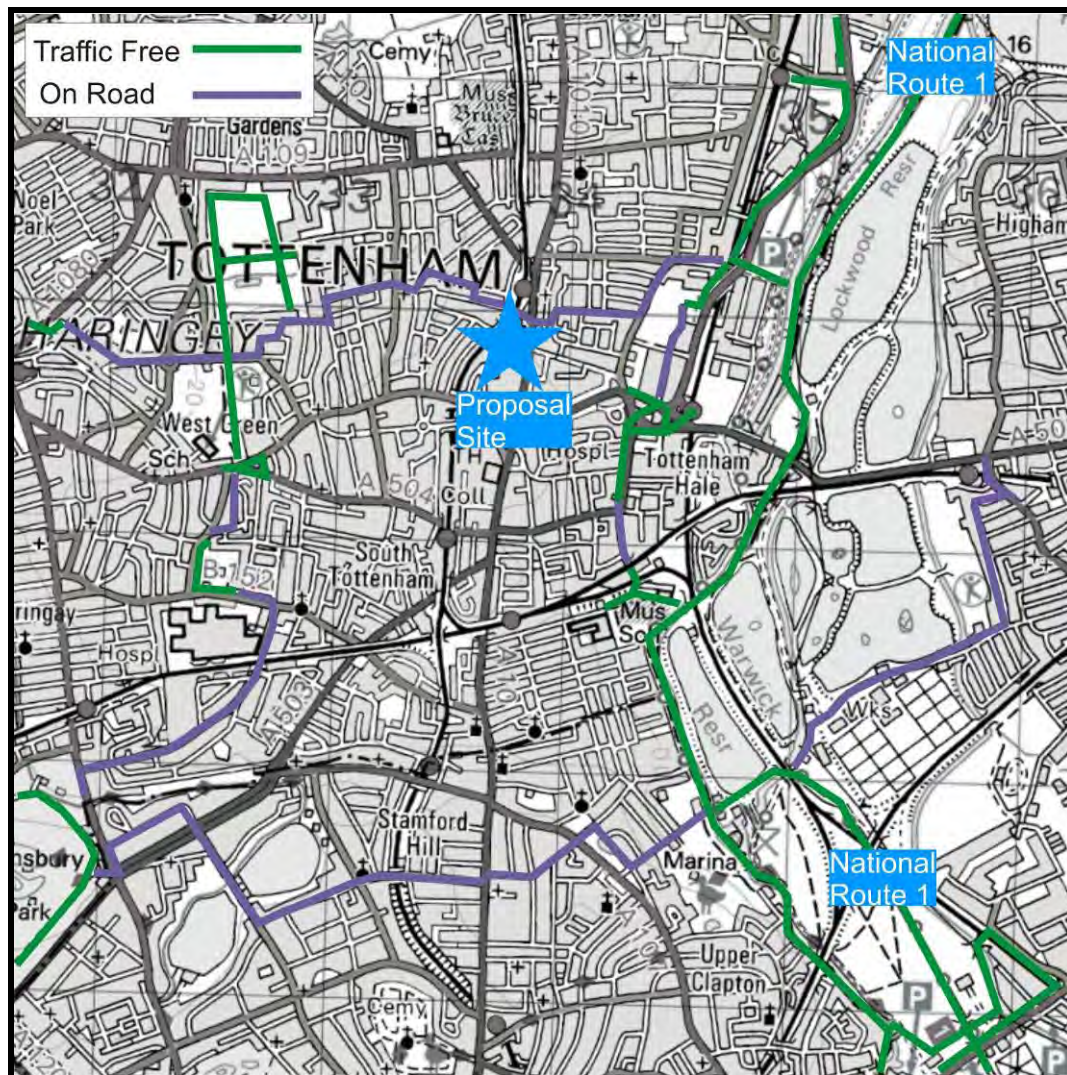
**Inset 2.2 – Cycle Catchment Isochrone**



- 2.3.3 The above inset shows that a large urban area is within 5km cycle distance of the site. 2011 census data for travel to work for the surrounding population, as set out at **Graph 2.1** below, indicates 4% of employed people travelling by cycle to/from work.
- 2.3.4 London contains a substantial number of both on-road and traffic free cycle routes and the local cycle context is provided at **Inset 2.3** below.



### Inset 2.3 – Cycle Context



- 2.3.5 An on-road cycle route crosses A10 High Road approximately 250m to the north of the site and the site is connected to London's greater cycle network.
- 2.3.6 National Route 1 is a long distance cycle route running along the east coast of England and Scotland and is a traffic free cycle route that passes local to the site.
- 2.3.7 Considering the above, cycling offers an attractive mode of transport to facilitate a variety of journey types for future residents, as well as extending sustainable access to numerous facilities.



## 2.4 PTAL

- 2.4.1 Public Transport Accessibility Level (PTAL) is an adopted method used to determine a location's accessibility by public transport. The method calculates the distance to public transport nodes and the frequency by which they are served to determine a total score ranging from 1 to 6b.
- 2.4.2 399 High Road has a PTAL rating of 6b, categorised as excellent and the highest achievable score, and a PTAL summary report has been provided at **Appendix 3**. Details of the local public transport facilities that have been provided below.

## 2.5 Access by Bus

- 2.5.1 The guidance contained within the IHT Guidelines entitled 'Planning for Public Transport in Developments' suggests a catchment area of 400m to bus stops.
- 2.5.2 **Inset 2.4** identifies the bus stops local to the proposal site, all of which are within IHT's suggested walk distance, as well as the location of signalised pedestrian crossings on route between the site and the stops.

### Inset 2.4 – Bus Stop Context



2.5.3 **Table 1** below indicates the destinations and approximate frequencies of the bus routes serving the bus stops identified in **Inset 2.4** above.

**Table 1 – Bus Service Details**

Service Number	Destinations	Monday - Friday	Saturday	Sunday
41	Archway Station – Hornsey Rise – Wood Green High Road – Seven Sisters Station – Tottenham	Every 3-6 minutes	Every 4-8 minutes	Every 8-11 minutes
149	London Bridge Bus Station – Liverpool Street Station – Hoxton Station – Dalston Junction Station – Manse Road – Stamford Hill Library – Tottenham	Every 5-9 minutes	Every 6-10 minutes	Every 6-10 minutes
230	Wood Green Station – West Green Primary School – Tottenham – Ferry Boat Inn – Blackhorse Road Station – Walthamstow Central Station – Leyton Green Road – Wood Street Station	Every 11-14 minutes	Every 12 minutes	Every 15 minutes
243	Tottenham – Stamford Hill Broadway – Rio Cinema – Laburnum Street – Waterloo Station	Every 5-9 minutes	Every 6-10 minutes	Every 7-11 minutes
259	Edmonton Green Bus Station – Tottenham – Woodberry Grove – Finsbury Park Station – Freegrove Road – Story Street – King's Cross	Every 6-10 Minutes	Every 6-10 Minutes	Every 8-12 Minutes
279	Tottenham – White Hart Lane Station – Shrubbery Road – Monmouth Road – Orchard Road – Enfield College – Ingersoll Road – Waltham Cross Bus Station	Every 4-6 minutes	Every 10-12 minutes	Every 12 minutes
318	North Middlesex Hospital – Great Cambridge Road – All Hallows Road – Chalgrove Road – Tottenham – Seven Sisters – Egerton Road	Every 15 minutes	Every 15 minutes	Every 20 minutes
349	Glyn Road – Tramway Avenue – Edmonton Green Bus Station – White Hart Lane Station – Tottenham – Egerton Road	Every 7-10 minutes	Every 6-10 minutes	Every 10-12 minutes
476	Northumberland Park Station – Tottenham – Stamford Hill Broadway – Stoke Newington Station – Barbauld Road – Beresford Road – Angel Station – King's Cross St Pancras	Every 6-10 minutes	Every 7-8 minutes	Every 11-13 minutes

2.5.4 The bus routes have a high frequency of services and connect the proposal site with key destinations across the City of London, as well as major transport nodes, and therefore provide access to an immense amount of facilities associated with all elements of life. Details of the identified bus routes are provided at **Appendix 3**.

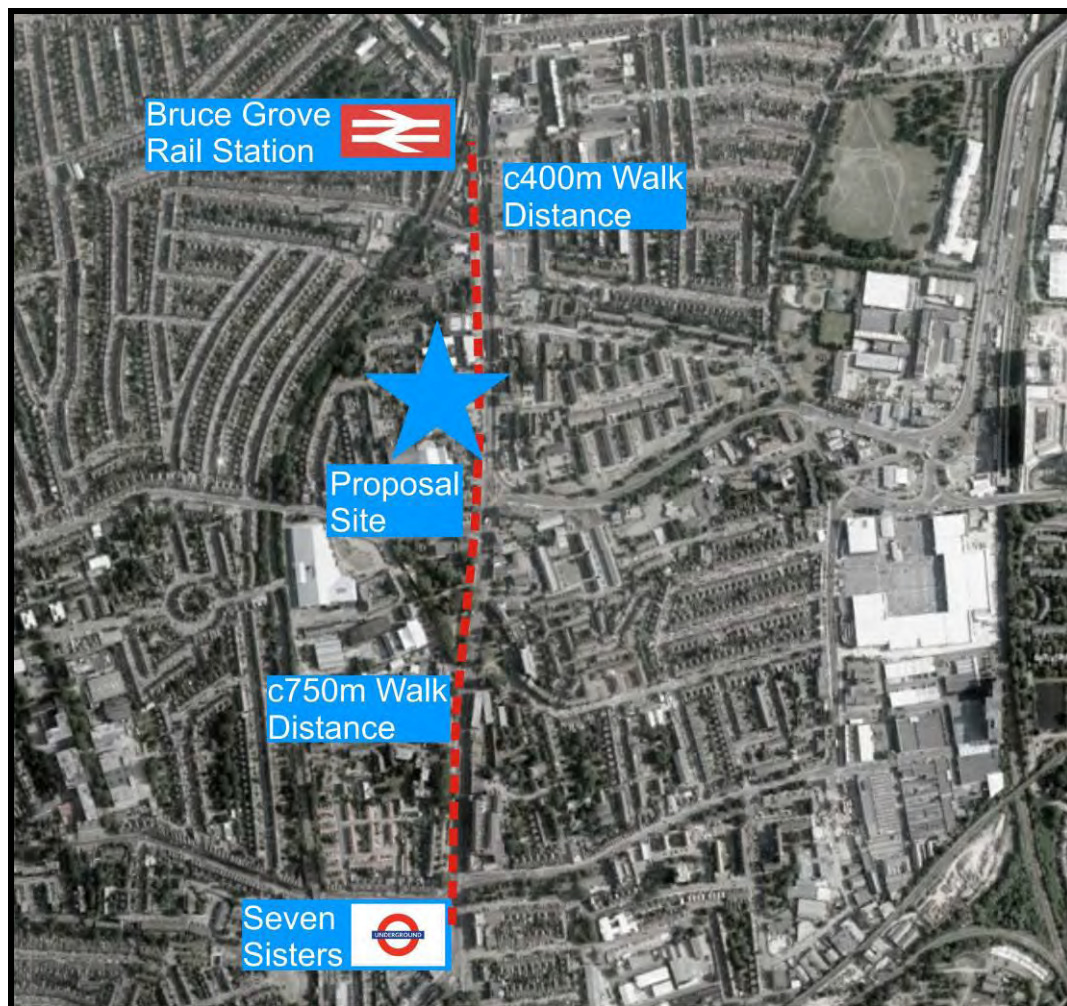
2.5.5 2011 census data for travel to work for the surrounding population, as set out at **Graph 2.1** below, indicates 24% of employed people travelling by bus to/from work.



## 2.6 Rail Access

- 2.6.1 The advice in the Institution of Highways and Transportation's (IHT) publication entitled 'Planning for Public Transport in Developments' suggests that railway stations have a walk catchment of 800m.
- 2.6.2 The closest railway stations are the Bruce Grove Railway Station, which is approximately 400m walk to the north of the proposal site, and the Seven Sisters Underground Station, which is approximately 750m walk distance from the proposal site, as shown at **Inset 2.5** below.

### Inset 2.5 – Rail Context



- 2.6.3 **Table 2** below identifies the approximate frequency of rail service from the stations identified above.

**Table 2 – Rail Service Details**

Service Number	Station	Destinations	Monday - Friday	Saturday	Sunday
Victoria Line	Seven Sisters	Walthamstow – Seven Sisters – Highbury and Islington – Euston – Oxford Circus – Victoria – Vauxhall – Brixton	Every 3 minutes	Every 3 minutes	Every 3 minutes
London Liverpool Street to Cheshunt	Bruce Grove	London Liverpool Street – Cambridge Heath – Hackney Downs – Stoke Newington – Bruce Grove – Silver Street – Turkey Street – Cheshunt	Every 30 minutes	Every 30 minutes	Every 30 minutes
London Liverpool Street to Enfield	Bruce Grove	London Liverpool Street – Cambridge Heath – Hackney Downs – Stoke Newington – Bruce Grove – Silver Street – Bush Hill Park	Every 30 Minutes	Every 30 Minutes	Every 30 Minutes

- 2.6.4 2011 census data for travel to work for the surrounding population, as set out at **Graph 2.1** below, indicates 42% of employed people travelling by rail to/from work.
- 2.6.5 The proximity of the rail stations and the connections to London Liverpool Street and Victoria provides future residents with immediate access to both medium and long distance travel.
- 2.6.6 Considering the proximity of bus stops and rail stations, the frequency of services, the locations accessible and the results of the PTAL assessment; the site is surrounded by a level of public transport infrastructure and service such that the future residents should have little or no need to travel by private car.

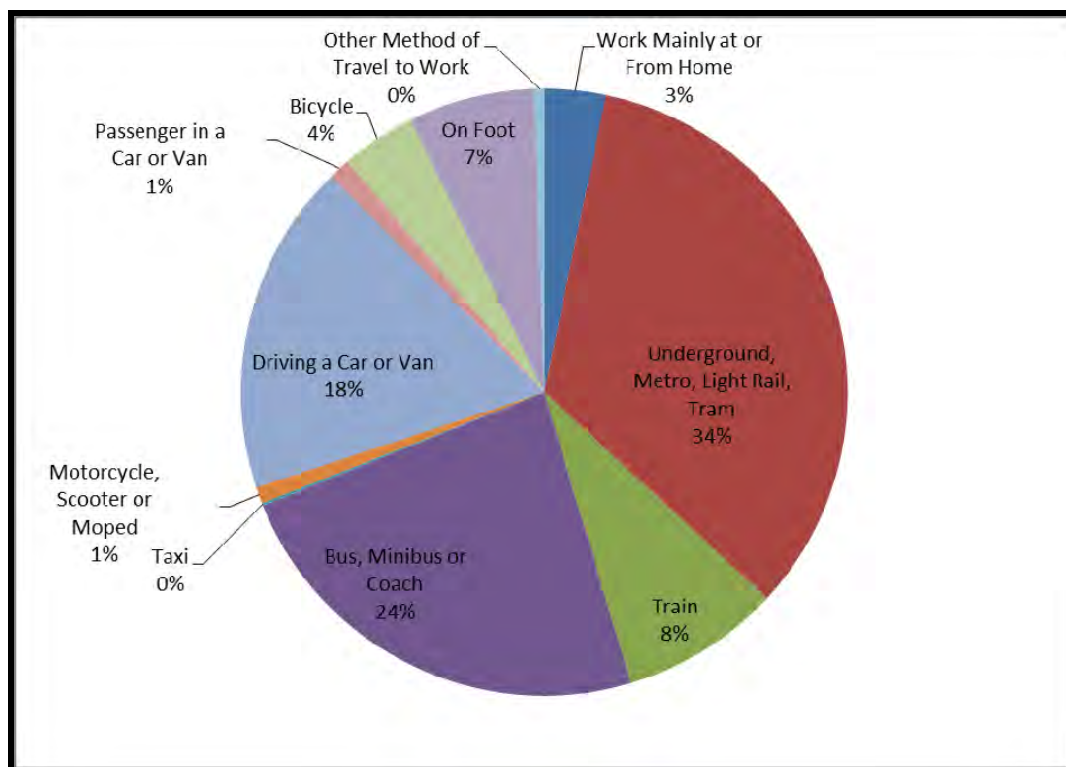
## **2.7 Highway Network**

- 2.7.1 The site is accessed from a junction with A10 High Road.
- 2.7.2 To the immediate south the A10 connects with the A1055 Monument Way at a 3-arm signal junction that allows southbound movements for only buses.
- 2.7.3 The A1055 connects with the A503 approximately 500m to the east at a large gyratory junction before continuing north with the A503 looping south to re-join the A10 and connect with the A504 at a 4-arm signal junction.
- 2.7.4 Approximately 700m to the north the A10 connects with the A1010 at a 3-arm signal junction and with the A109 at a mini roundabout slightly farther north.
- 2.7.5 Farther to the north the A10 connects with the A406 North Circular Road before connecting with the M25 at junction 25, while farther to the south the A10 links with the A104, A11 and A13.
- 2.7.6 Based on the above, the site benefits from a good level of accessibility via the highway network.

## 2.8 Method of Travel to Work

- 2.8.1 2011 census data for the area surrounding the site (represented by Super Output Area Middle Layers Haringey 011, 012, 018, 024 and 025) has been used to interrogate the potential travel to work habits of the future residents of the proposed units.
- 2.8.2 The census data shows only 18% of residents travelling to work as the car driver with 66% utilising public transport, further underlining the site's excellent access to bus and rail facilities. The results are provided at **Graph 2.1** below.
- 2.8.3 The census data also shows 11% of residents travelling to work by either foot or cycle, further underlining the site's good location relative to these sustainable modes.

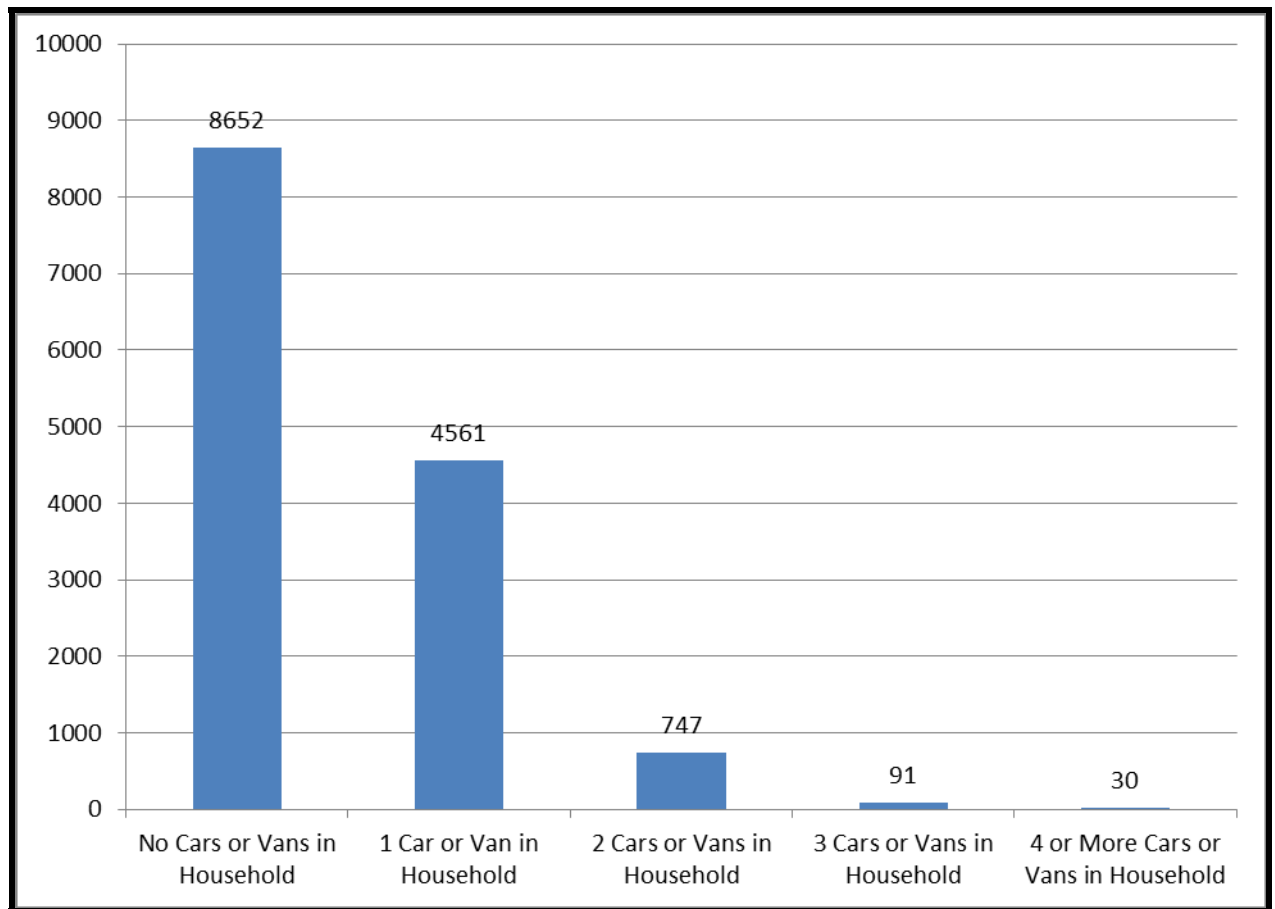
**Graph 2.1 – 2011 Census Data for Travel to Work**



## 2.9 Car Ownership

- 2.9.1 The 2011 census data for car ownership identifies 61% of households in the surrounding population (represented by Super Output Area Middle Layers Haringey 011, 012, 018, 024 and 025) do not own a private car or van.
- 2.9.2 The census data for car ownership is provided at **Graph 2.2** below and indicates that the majority of households local the proposal site have no need to own a private car.

**Graph 2.2 – 2011 Census Data for Car Ownership**



## 2.10 Access to Education

2.10.1 The statutory maximum walking distance for pupils aged between five and eight years is two miles (3.2km), for those aged over eight years the distance is three miles (4.8km). Data from the National Travel Survey<sup>1</sup> shows that the proportion of primary pupils walking to school decreases sharply for trip lengths in excess of one mile (1.6km). **Table 3** below contains a summary of National Travel Survey (NTS) Table 0614, 'trips to school by main mode, trip length and age'.

**Table 3 – NTS 0614 Summary**

Age Group	Mode \ Distance	<1 mile	1-2 miles	2-5 miles	5+ miles
5-10 years	Walk	78.9%	28.8%	2.4%	0.0%
	Bicycle	1.8%	3.1%	1.7%	0.0%
	Car/van	19.0%	58.7%	81.8%	70.9%
	Bus	0.0%	6.7%	10.6%	23.4%
	Other	0.0%	2.7%	3.5%	5.6%
11-16 years	Walk	88.8%	53.8%	9.9%	0.0%
	Bicycle	1.9%	3.0%	4.0%	0.0%
	Car/van	7.0%	28.9%	37.5%	30.4%
	Bus	2.3%	12.4%	41.7%	60.9%
	Other	0.0%	1.9%	7.0%	8.7%

2.10.2 Welbourne Primary School is an approximate 400m from the site and The Mulberry Primary School is an approximate 800m from the site. Both primary schools are within the recommended walking distance for children of primary school age, as well as being within the distance where 81% of trips to school by 5-10 year olds are made by non-car modes.

2.10.3 Park View School is approximately 1.5km from the proposal site and so is within the statutory walking distance for children over the age of eight. The NTS data suggests that 93.0% of trips to secondary schools are undertaken by non-car modes of transport. North London College is within 100m walk from the site and The College of North East London is within 500m walk distance of the site.

2.10.4 The distances to the nearest primary and secondary schools are less than the statutory maximum walking distance for pupils. The close proximity of the schools to the proposal site makes it highly likely that any future students will use walking, cycling or public transport as modes of transport for journeys to/from school.

2.10.5 As well as the above, there is a large number of other education establishments within 2km of the site.

## 2.11 Conclusions

2.11.1 Based on the above assessment, the proposed development benefits from an excellent level of accessibility to key services, facilities and destinations, demonstrating that, by virtue of its location, it will be unnecessary for future residents to own a private car.

2.11.2 The site is within walk and cycle distance of a large number of facilities related to retail, employment, leisure and education.

<sup>1</sup> Table 0614 "trips to school by main mode, trip length and age", National Travel Survey, 2012



- 2.11.3 The site's high PTAL score, the proximity of bus stops and rail stations, the frequency of services and the destinations accessible mean that public transport represents a highly attractive method of travel for future residents of the proposed development.
- 2.11.4 **Table 4** below reiterates the 2011 census data for method of travel to work and identifies that only 18% of residents travel to work as a car driver with 77% either walking, cycling or utilising public transport.
- 2.11.5 2011 census data for car ownership indicates that over 61% of households in the surrounding area do not own a car.

**Table 4 – 2011 Travel to Work Census Data**

Method of Travel	2011 Census Data for Super Output Area Middle Layers Haringey 011,012,018, 024 and 025
Work Mainly at or From Home	3%
Rail	42%
Bus	24%
Taxi	0%
Motorcycle	1%
Car/Van Driver	18%
Car Passenger	1%
Bicycle	4%
On Foot	7%
Other	1%

### 3.0 PROPOSED SITE ACCESS ARRANGEMENTS & PARKING PROVISION

#### 3.1 Introduction

- 3.1.1 This section of the report will provide details of the proposed site access arrangements, including vehicular access, pedestrian access, parking provision and servicing. The plan at **Appendix 2** shows the proposed site layout.

#### 3.2 Vehicular Site Access Arrangements

- 3.2.1 The site is currently served from a vehicular access with A10 High Road on its eastern boundary. The development proposals do not include any amendments to the vehicular access arrangements or car parking provision.

#### 3.3 Pedestrian and Cycle Site Access Arrangements

- 3.3.1 Pedestrian access to the proposed residences will be provided from the footways along A10 High Road.
- 3.3.2 Cycle access to the apartments will be provided from the existing A10 High Road vehicular access.

#### 3.4 Servicing

- 3.4.1 The site contains an existing refuse store on its northern boundary and this will be increased as part of the proposals. Refuse vehicles will continue to serve the site as existing.

#### 3.5 Parking Provision

- 3.5.1 Paragraph 39 of the National Planning Policy Framework NPPF states:-

*If setting local parking standards for residential and non-residential development, local planning authorities should take into account:*

- *The accessibility of the development;*
- *The type, mix and use of the development;*
- *The availability of and opportunities for public transport;*
- *Local car ownership levels; and*
- *An overall need to reduce the use of high-emission vehicles.*

- 3.5.2 Haringey Council's 'Unitary Development Plan Saved Policies Document' (UDP) dated March 2013 contains the council's parking standards. Under policy M10 titled 'Parking for Development' it states that development will be assessed against their parking standards at Appendix 1.
- 3.5.3 The standards set out a maximum provision for two bedroom flats of one space and for one bedroom flats of 0.33 spaces. This would equate to a maximum provision of ten spaces ( $1 \times 4 + 0.33 \times 19 = 10$ ) for the proposed residences. There are no minimum standards.
- 3.5.4 The site currently has approximately eight parking spaces for the site's existing uses and it is not proposed to alter the level of parking as part of the development.
- 3.5.5 The UDP cycle parking standards identify that one space per residential unit should be provided where possible. It is proposed to provide 23 cycle parking spaces, therefore meeting local standards.

## 4.0 TRAFFIC DATA

### 4.1 Introduction

4.1.1 This section of the report provides the traffic data used for the assessment.

4.1.2 In spite of the fact that the proposals do not include an increase in site associated parking, in order to be thorough an assessment of the potential traffic effect has been undertaken.

### 4.2 Site Flows

4.2.1 TRICS version 6.12.2 has been used to calculate the trip attraction of the proposed houses using average trip rates. A dataset of the land use '03 - Residential' sub land use 'C - Flats Privately Owned' has been interrogated for all sites located in Greater London and the resultant peak hour traffic generation is provided below at **Table 5**. The TRICS outputs are provided at **Appendix 4**.

**Table 5 – Privately Owned Flats: Vehicle Trip Rate**

Peak Hour	Trip Rates (per dwelling)			Calculated Trips (23 dwellings)		
	In	Out	Total	In	Out	Total
AM Peak (07:00 – 08:00)	0.016	0.08	0.96	0	2	2
AM Peak (08:00 – 09:00)	0.061	0.147	0.208	1	3	5
PM Peak (16:00 – 17:00)	0.051	0.038	0.089	1	1	2
PM Peak (17:00 – 18:00)	0.084	0.046	0.13	2	1	3
Daily (07:00 – 19:00)	0.763	0.810	1.573	18	19	36

4.2.2 The results of the TRICS assessment show that the proposed development is likely to have a negligible effect on the local highway network during the assessed periods.

### 4.3 Net Change

4.3.1 As no parking for the residential units is proposed, the negligible number of vehicle trips calculated are likely to manifest as either taxi trips or people being dropped off / picked up by friends/family/colleagues.

4.3.2 As **Table 5** above represents the calculated potential net increase associated with the site's proposed 23 flat residential extension and shows both peak hour and daily negligible increases in the site's traffic attraction, no further assessment of the site's associated traffic has been undertaken.

#### **4.4 Road Safety**

- 4.4.1 Based on the results above, which show a negligible change in the site's associated traffic attraction, it can be concluded that the proposed development will not worsen any pre-existing road collision patterns that may exist.

#### **4.5 Junction Access Capacity**

- 4.5.1 Similarly, based on the resultant traffic effects, it can also be concluded that the proposed development will not materially affect the operation of any local junctions.

#### **4.6 Section Conclusion**

- 4.6.1 The assessment shows a negligible change in the site's associated traffic.



## **5.0 SUMMARY & CONCLUSIONS**

### **5.1 Summary**

5.1.1 Connect Consultants Limited is a firm of specialist highways, traffic and transportation planning consultants that have been instructed by Alto Properties Investment Limited in respect of their planning application for a residential development at land adjacent to 399 High Road, Tottenham.

5.1.2 A summary of this report is as follows:-

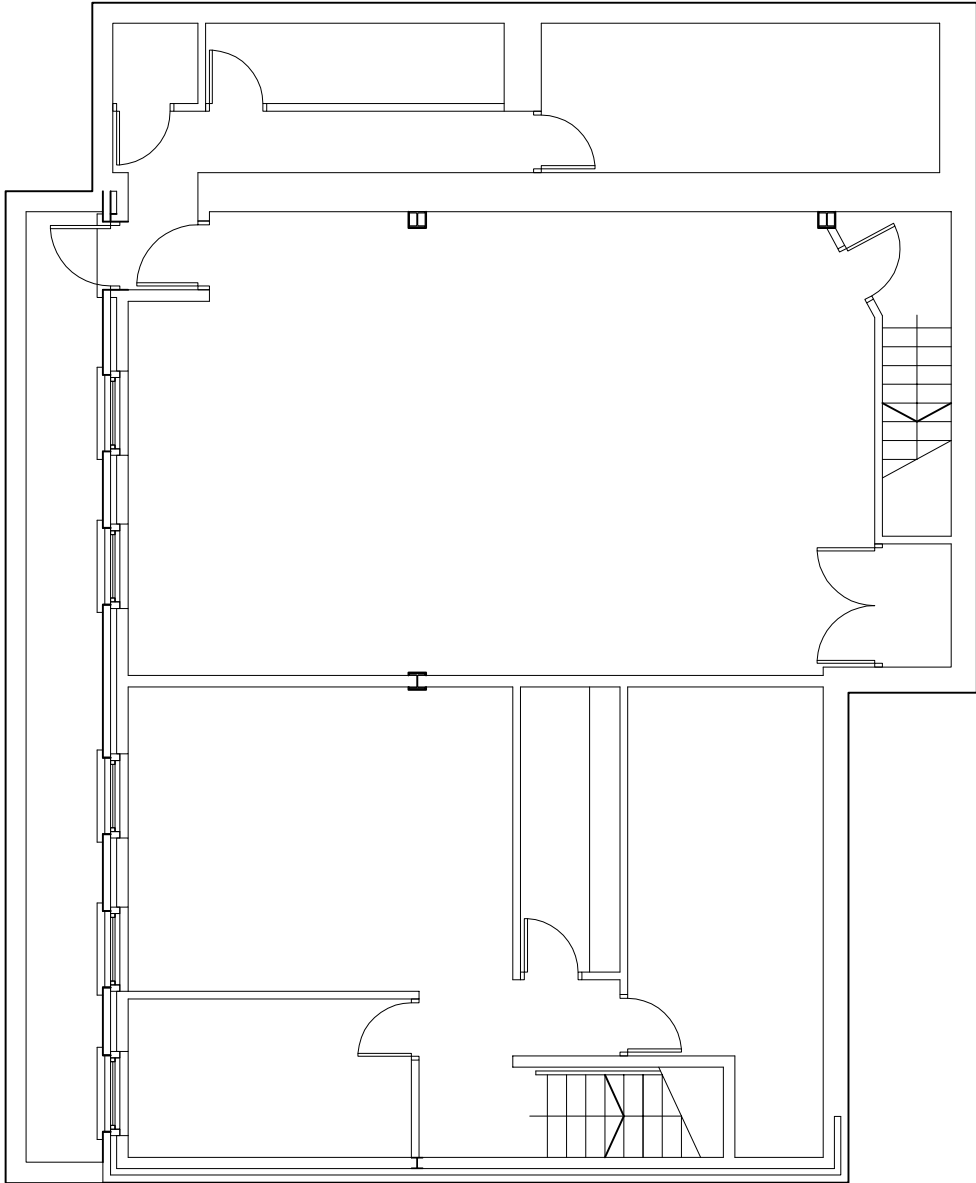
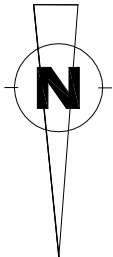
- The proposal is for an extension to the existing building of 23 residential flats.
- The proposal site is within walking distance of a wide range of facilities including bus stops, Bruce Grove Railway Station, Seven Sisters Underground Station, Schools, Retail, Banks, foodstores, a library, a leisure centre, Tottenham Hale Retail Park and a number of parks.
- There is a large urban area within cycle distance and local cycle routes within close proximity to the site.
- The site achieves a PTAL score of 6b excellent with bus stops adjacent to the site and two rail stations within walking distance, and is therefore highly accessible by public transport.
- The site's high level of accessibility by a choice of travel modes means that there is no obvious reason for future residence to rely on the private car.
- It is not proposed to provide any additional on-site parking, with the site's existing parking remaining associated with its existing use.
- An assessment of the net development traffic effect has identified a negligible change in the site's associated traffic.

### **5.2 Conclusions**

5.2.1 On the basis of the above, it is concluded that the development is acceptable from a transport perspective.

## **Appendix 1 Existing Site Layout**

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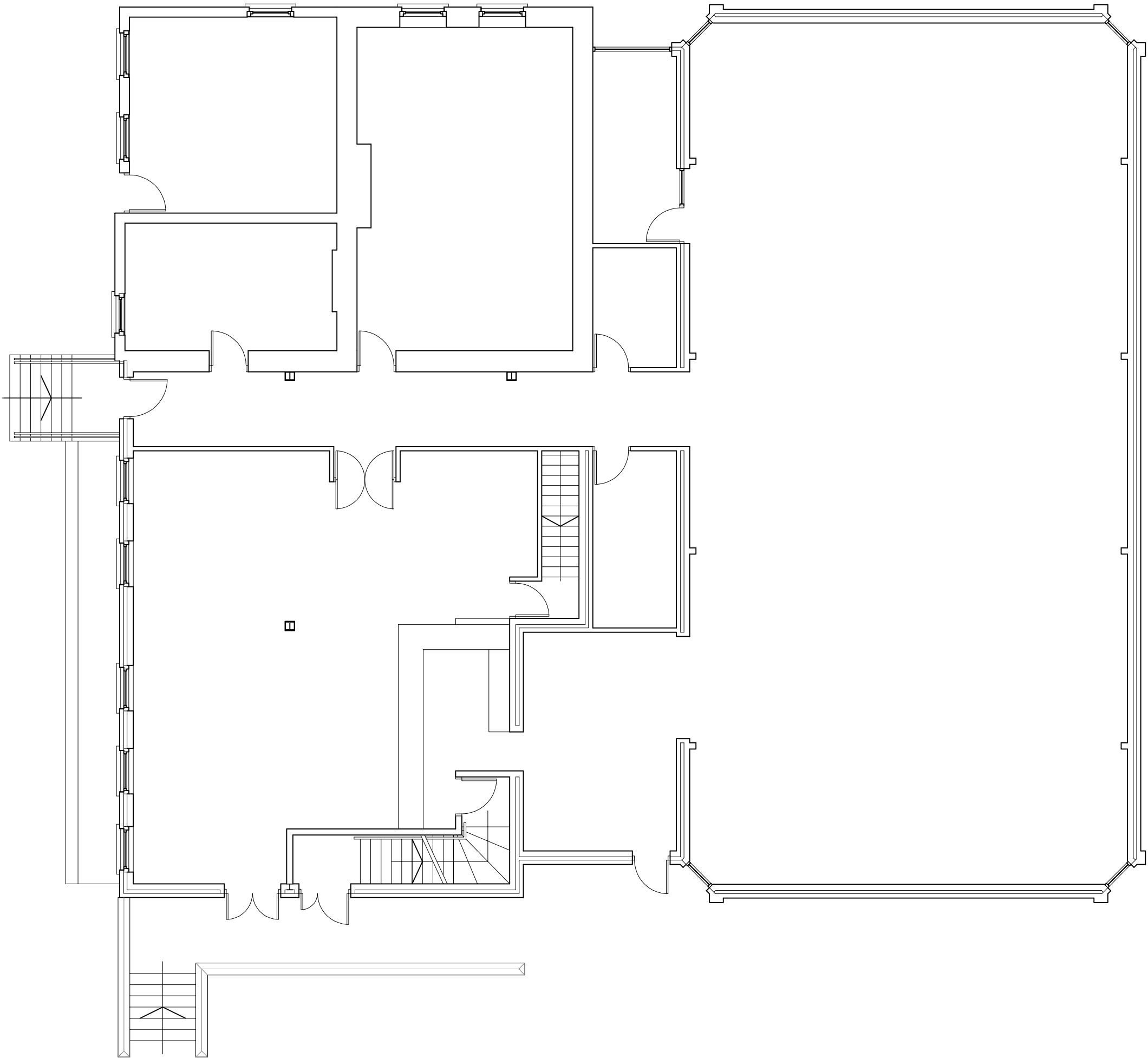
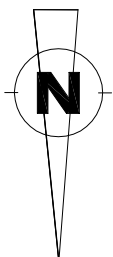
Basement Floor Plan

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**ADArchitects**

Winter Lodge, Sudbury Road  
Hastings  
East Sussex TN38 5JY  
Tel: 01787 475688  
e-mail: [info@adarchitects.org.uk](mailto:info@adarchitects.org.uk)

PROJECT:		399 Tottenham High Road									
		London									
		N17 6QN									
SUBJECT:		EXISTING									
		BASEMENT FLOOR PLAN									
DRAWING NO:		311/02									
SCALE:		1:100 @ A2									
DRAWN BY:		WJH									
		CHECKED BY:									
REV:											

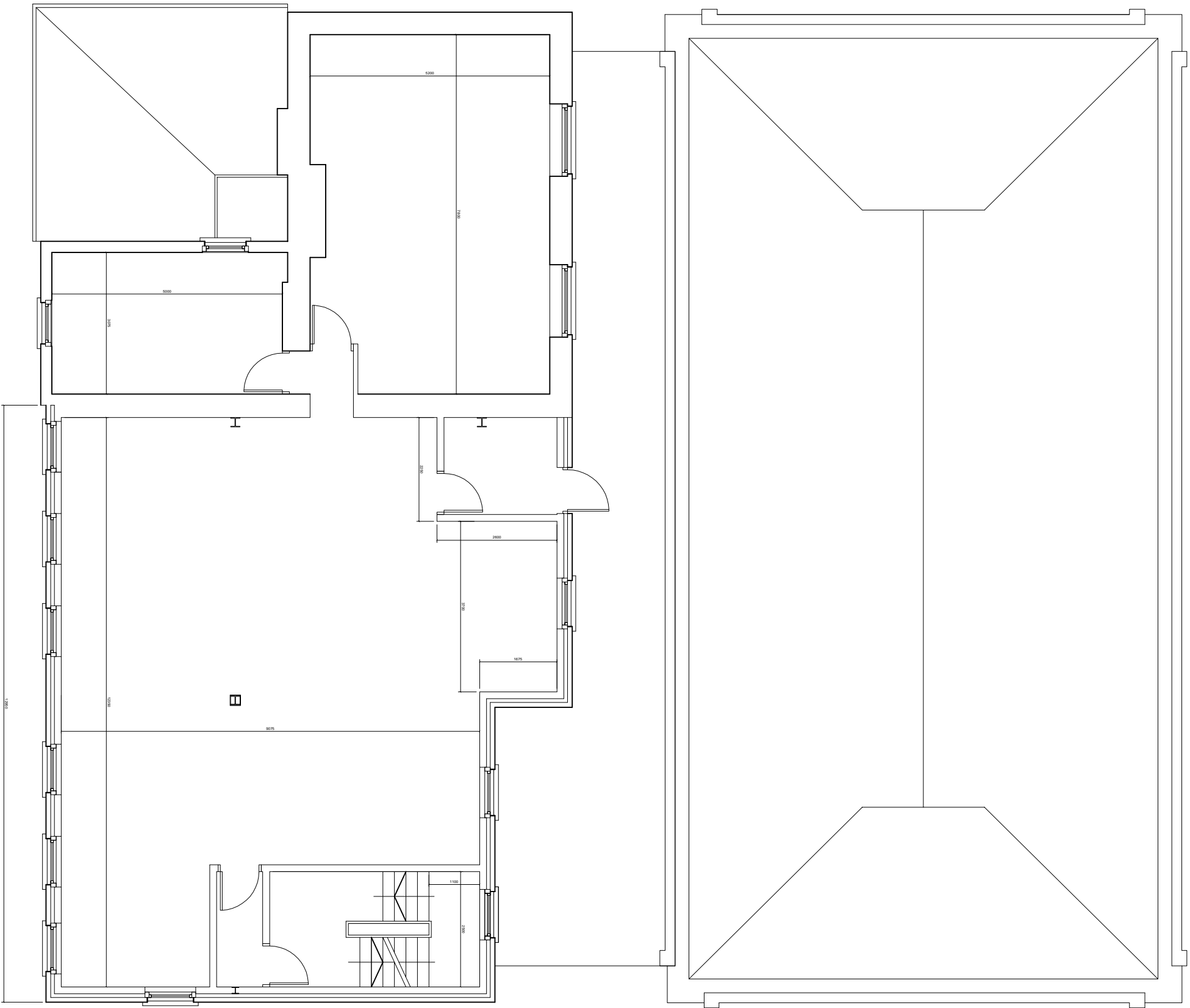
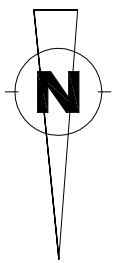


Ground Floor Plan

--	--

**ADArchitects**  
Winter Lodge, Sudbury Road  
Haverhill, Suffolk IP20 9BS  
Tel: 01787 475688  
e-mail: [info@adarchitects.org.uk](mailto:info@adarchitects.org.uk)

PROJECT: 399 Tottenham High Road London N17 6QN	
SUBJECT: EXISTING GROUND FLOOR PLAN	
DRAWING NO: 311/03	
SCALE: 1:100 @ A2	DATE: JULY 2013
DRAWN BY: WLH	CHECKED BY:
REV:	



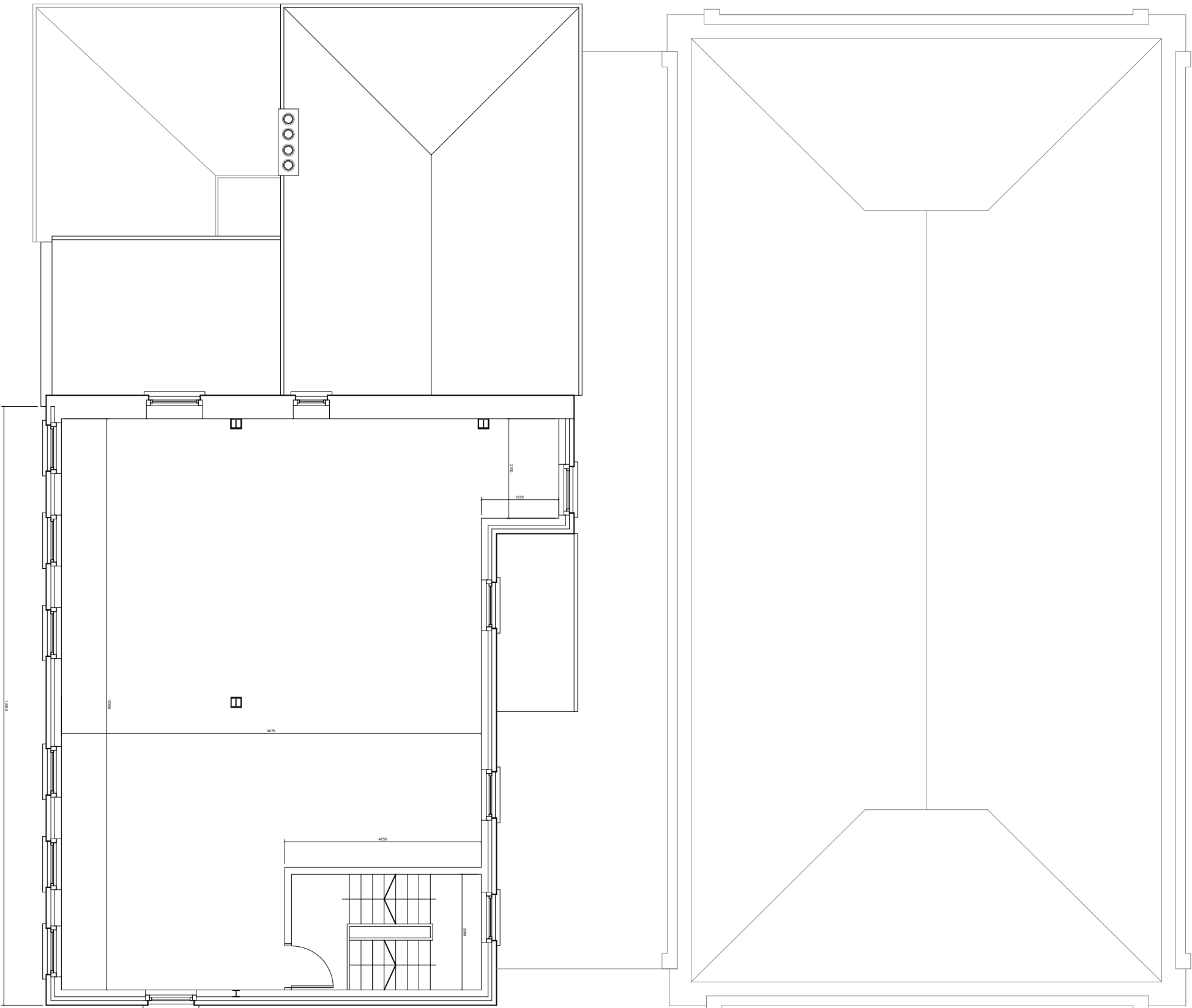
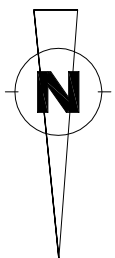
First Floor Plan

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**ADArchitects**  
Winter Lodge, Sudbury Road  
Haverhill  
Essex CO9 2RS31  
Tel: 01787 475688  
e-mail: info@adarchitects.org.uk

PROJECT: 399 Tottenham High Road London N17 6QN	
SUBJECT: EXISTING FIRST FLOOR PLAN	
DRAWING NO. 311/04	
SCALE: 1:100 @ A2	DATE: JULY 2013
DRAWN BY: WLH	CHECKED BY:
REV:	





Second Floor Plan

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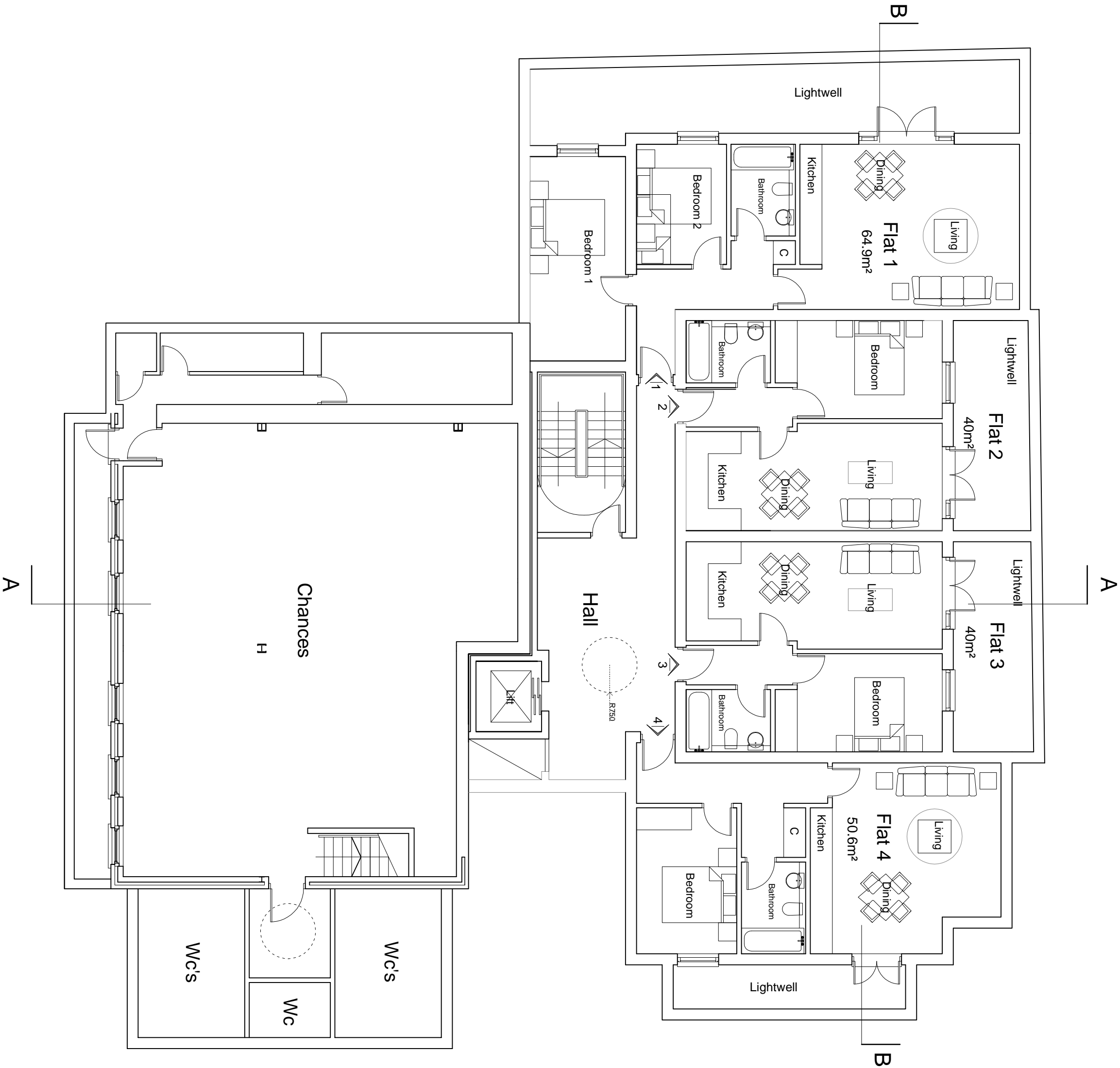
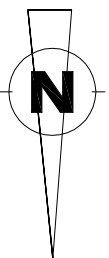
**ADArchitects**  
Winter Lodge, Sudbury Road  
Haverhill  
Essex CO9 2RS31  
Tel: 01787 475688  
e-mail: info@adarchitects.org.uk

PROJECT: 399 Tottenham High Road London N17 6QN	
SUBJECT: EXISTING SECOND FLOOR PLAN	
DRAWING NO: 311/05	
SCALE: 1:100 @ A2	DATE: JULY 2013
DRAWN BY: WJH	CHECKED BY:
REV:	

## **Appendix 2**

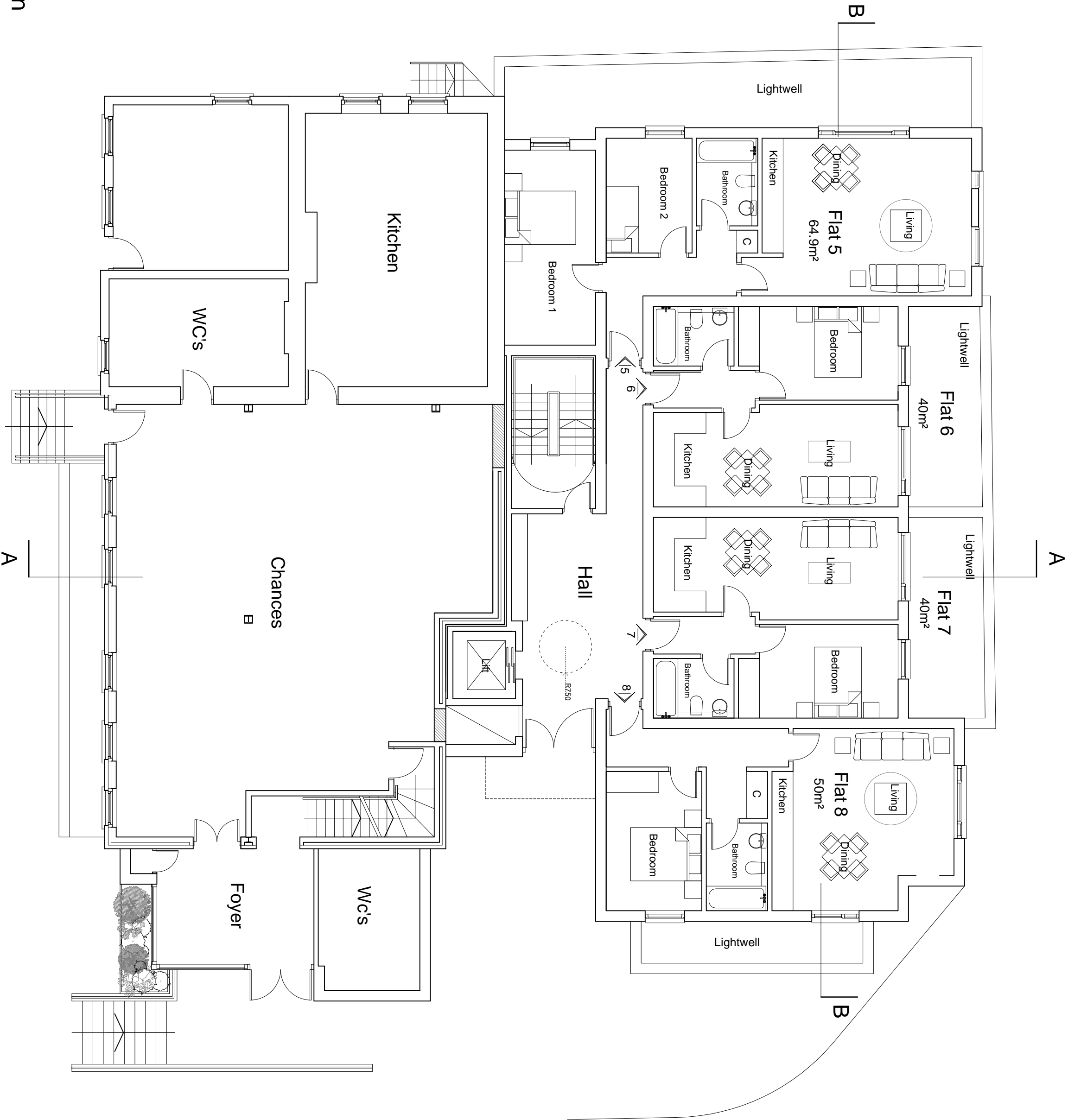
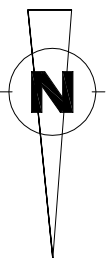
# **Proposed Site Layout**

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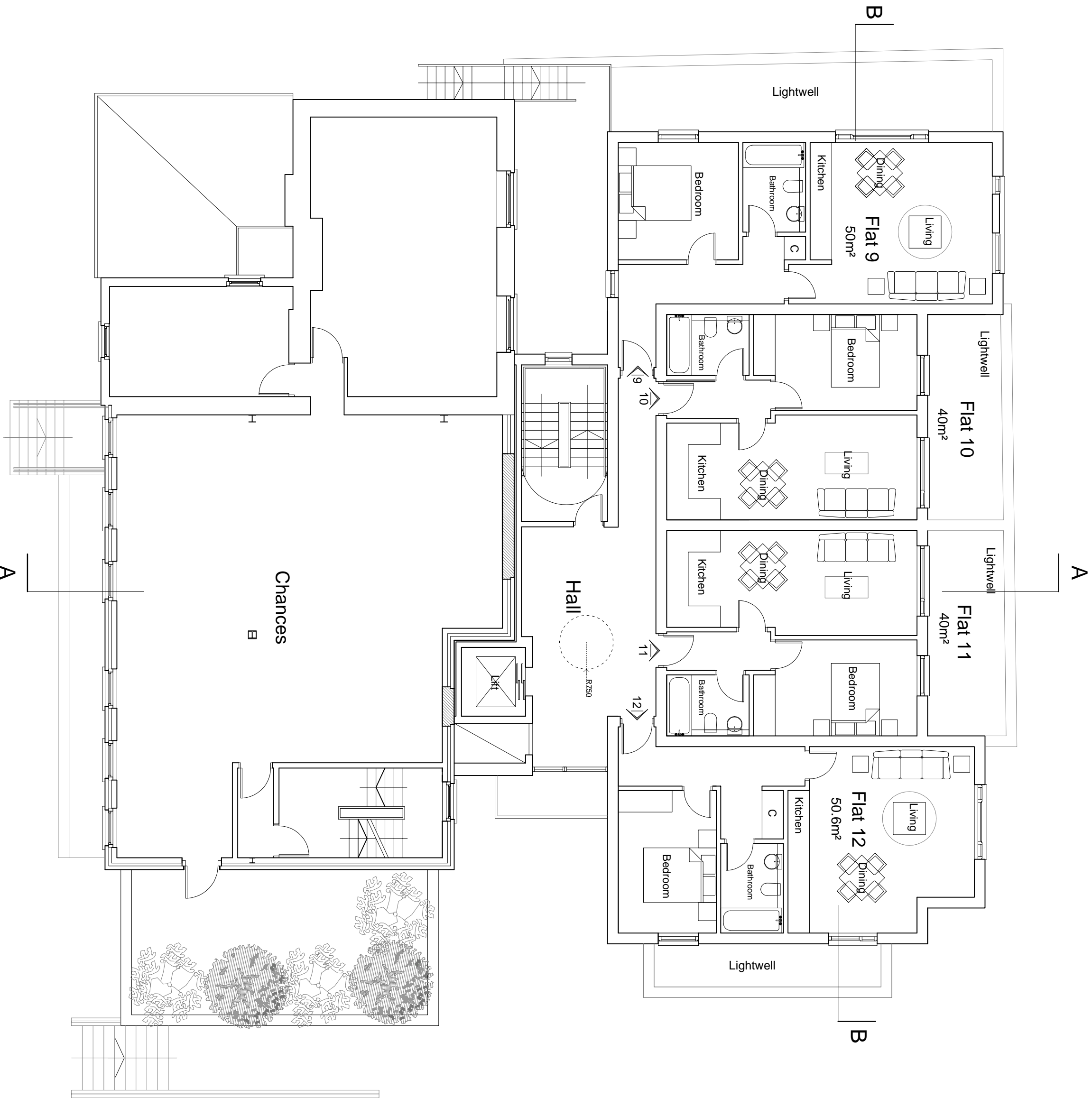
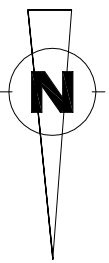
Basement Floor Plan

<b>ADAarchitects</b>																													
Winter Lodge, Sudbury Road																													
Haverhill																													
Essex, CO9 2RS31																													
Tel: 01787 475688																													
e-mail: info@adaarchitects.org.uk																													
PROJECT: 399 Tottenham High Road																													
London																													
N17 6QN																													
SUBJECT: PROPOSED																													
BASEMENT FLOOR PLAN																													
DRAWING NO. 311/12																													
SCALE: 1:100 @ A2										DATE: JULY 2013																			
DRAWN BY: WLH										CHECKED BY:																			
REV:																													
B					C					D					E					F					G				



Ground Floor Plan

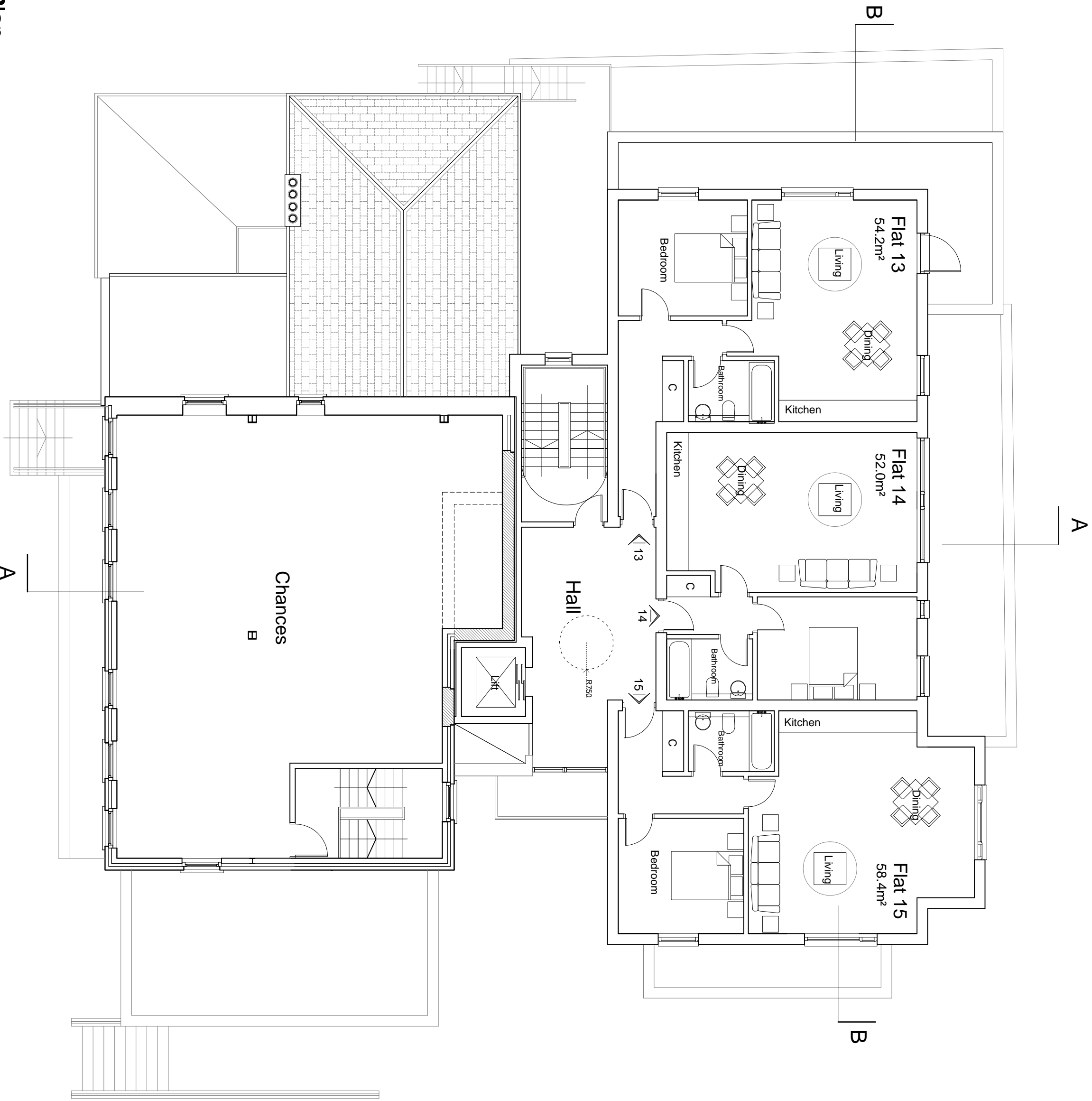
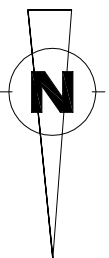
<b>ADAarchitects</b>																			
Winter Lodge, Sudbury Road										Haverhill									
Essex, CO9 2RS31										Tel: 01787 475688									
e-mail: info@adaarchitects.org.uk																			
PROJECT: 399 Tottenham High Road																			
London																			
N17 6QN																			
SUBJECT: PROPOSED																			
GROUND FLOOR PLAN																			
DRAWING NO. 311/13																			
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DRAWN BY: WLH										CHECKED BY:									
REV:		C	D	E	F	G				REV:		C	D	E	F	G			



First Floor Plan

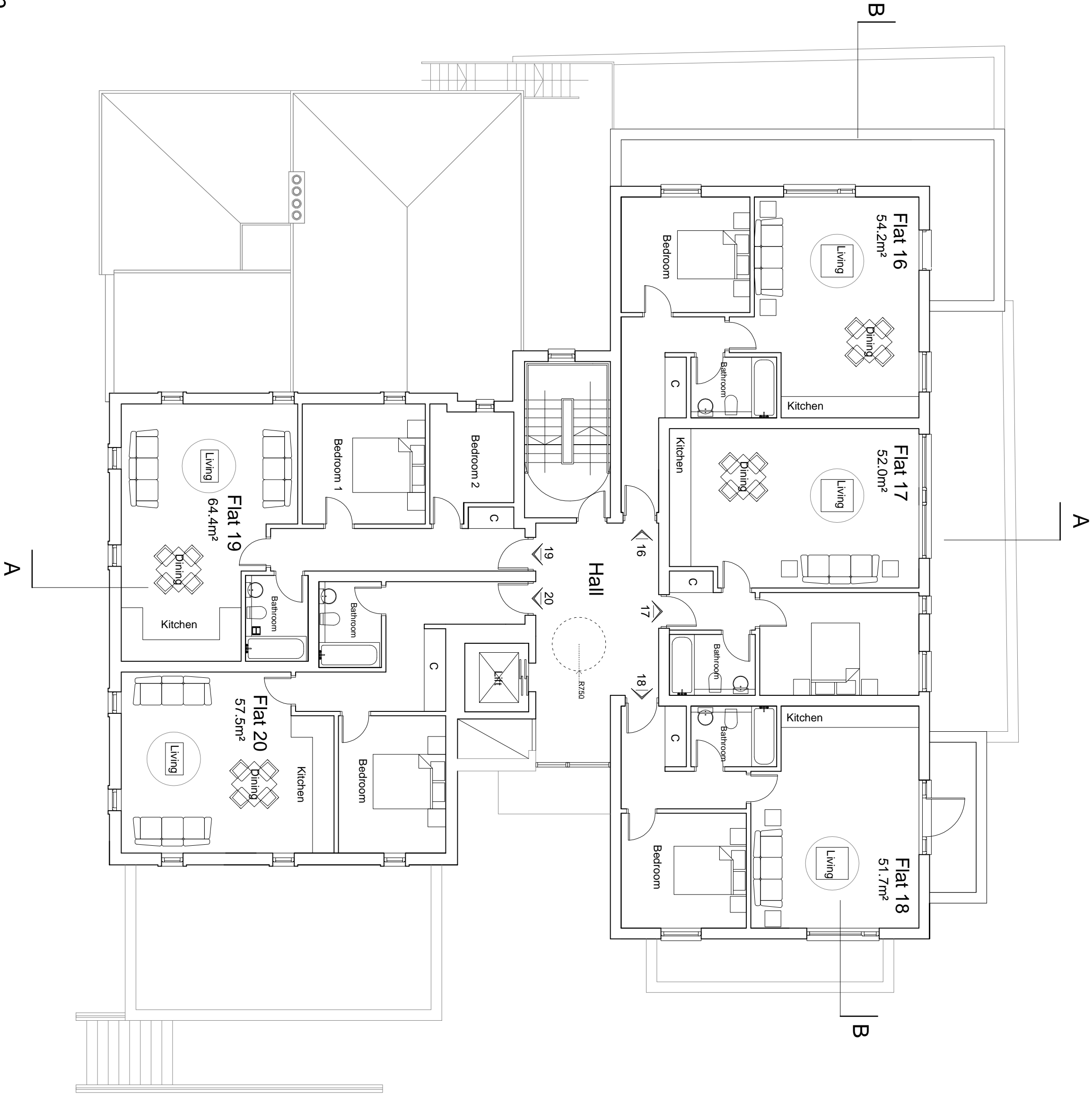
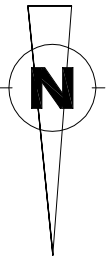
ADAarchitects		Winter Lodge, Sudbury Road		Haverhill		Essex CO9 2RS31		Tel: 01787 475688		e-mail: info@adaarchitects.org.uk	
PROJECT: 399 Tottenham High Road		London		N17 6QN		SUBJECT: PROPOSED		FIRST FLOOR PLAN		DRAWING NO. 311/14	
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										E	
										F	
										G	





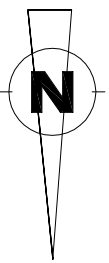
Second Floor Plan

<b>ADArchitects</b>																			
Winter Lodge, Sudbury Road Haverhill Essex CO9 2RS31 Tel: 01787 475688 e-mail: info@ <b>ad</b> architects.org.uk																			
PROJECT: 399 Tottenham High Road London N17 6QN																			
SUBJECT: PROPOSED SECOND FLOOR PLAN																			
DRAWING NO. 311/15																			
SCALE: 1:100 @ A2										DATE: JULY 2013									
DRAWN BY: WLH										CHECKED BY:									
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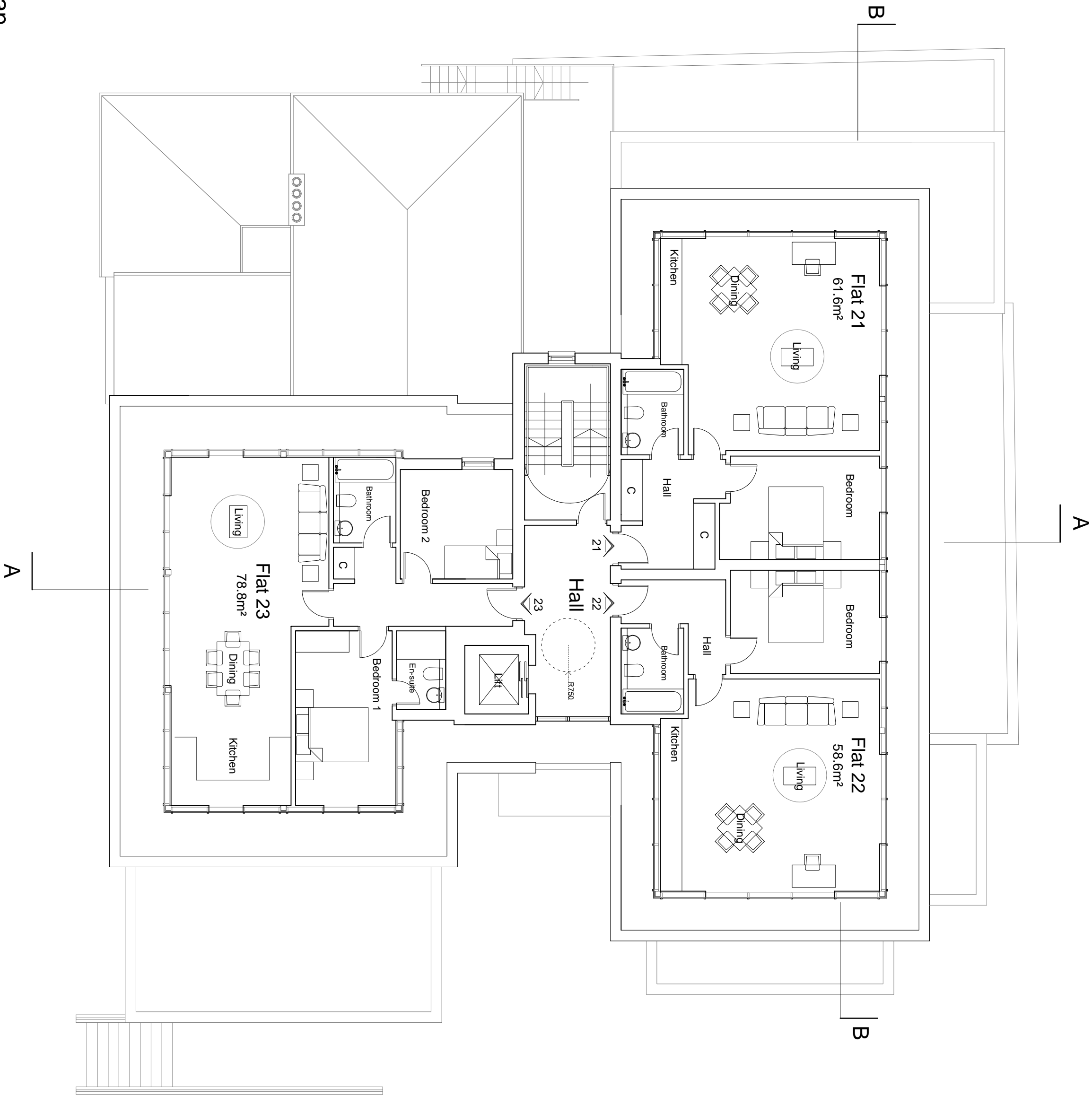


Third Floor Plan

<div>ADAarchitects</div> <div>Winter Lodge, Sudbury Road Haverhill Essex CO9 2RS31 Tel: 01787 475688 e-mail: info@adaarchitects.org.uk</div>									
PROJECT: 399 Tottenham High Road London N17 6QN									
SUBJECT: PROPOSED THIRD FLOOR PLAN									
DRAWING NO. 311/16									
SCALE: 1:100 @ A2		DATE: JULY 2013							
DRAWN BY: WLH		CHECKED BY:							
REV.	B	C	D	E	F	G			



Fourth Floor Plan



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Winter Lodge, Sudbury Road  
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Tel: 01787 475688  
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PROJECT: 399 Tottenham High Road  
London  
N17 6QN

SUBJECT: PROPOSED  
FOURTH FLOOR PLAN

DRAWING NO. 311/17

SCALE: 1:100 @ A2  
DATE: JULY 2013  
DRAWN BY: WLH  
CHECKED BY:

REV. B C D E F G

## **Appendix 3**

### **Public Transport Details**

# London Buses

# 41

Daily



## Buses towards Tottenham Hale Bus Station



### Monday to Friday

First buses	6 to 7am	7 to 8am	8am to 8pm	8 to 9pm	9pm to Midnight	Midnight to 1am	Last buses
05 14 05 44	about every <b>10-11</b> minutes	about every <b>5-8</b> minutes	about every <b>3-6</b> minutes	about every <b>5-8</b> minutes	about every <b>8-10</b> minutes	00 06 00 16 00 26 00 46	01 06 01 26 01 46

### Saturday

First buses	6 to 7am	7 to 9am	9am to 8pm	8pm to Midnight	Midnight to 1am	Last buses
05 14 05 44	06 11 06 23 06 33 06 42 06 56	about every <b>9-10</b> minutes	about every <b>4-8</b> minutes	about every <b>8-10</b> minutes	00 06 00 16 00 26 00 46	01 06 01 26 01 46

### Sunday

First buses	6 to 8am	8 to 9am	9 to 10am	10am to Midnight	Midnight to 1am	Last buses
05 14 05 44	At these 11 minutes 31 past the 51 hour	08 11 08 26 08 41 08 56	09 11 09 26 09 37 09 48 09 59	about every <b>8-11</b> minutes	00 06 00 16 00 26 00 46	01 06 01 26 01 46

Operated by Arriva London for London Buses

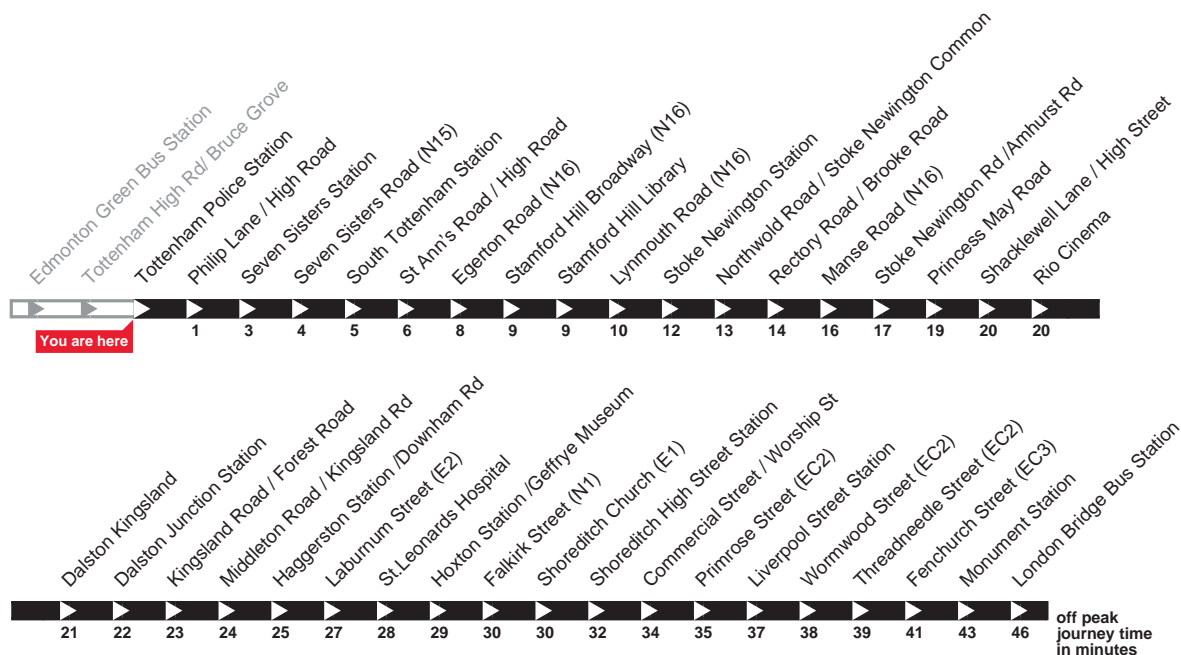


# London Buses

# 149

## 24 hour service

Buses towards London Bridge Bus Station



### Monday to Thursday

Midnight to 00:30am	00:30 to 1am	1 to 3am	3 to 4am	4 to 5am	5 to 6am	6 to 8am	8am to 4pm	4 to 6pm	6 to 11pm	11pm to Midnight
00 19	00 49	At these minutes past the hour 19 49	03 19 03 53	about every <b>10</b> minutes	about every <b>5-9</b> minutes	about every <b>3-5</b> minutes	about every <b>5-9</b> minutes	about every <b>4-5</b> minutes	about every <b>5-9</b> minutes	23 06 23 14 23 22 23 30 23 38 23 46 23 54

### Friday

Midnight to 00:30am	00:30 to 1am	1 to 3am	3 to 4am	4 to 5am	5 to 6am	6 to 8am	8am to 10pm	10 to 11pm	11pm to Midnight
00 19	00 49	At these minutes past the hour 19 49	03 19 03 53	about every <b>10</b> minutes	about every <b>5-9</b> minutes	about every <b>3-5</b> minutes	about every <b>4-8</b> minutes	about every <b>8-9</b> minutes	23 06 23 14 23 22 23 30 23 38 23 46 23 54

### Saturday

Midnight to 00:30am	00:30 to 1am	1 to 2am	2 to 3am	3 to 4am	4 to 6am	6am to 11pm	11pm to Midnight
00 17	00 47	01 17 01 47	02 17 02 49	03 21 03 53	about every <b>10-12</b> minutes	about every <b>6-10</b> minutes	23 06 23 14 23 22 23 30 23 38 23 46 23 54

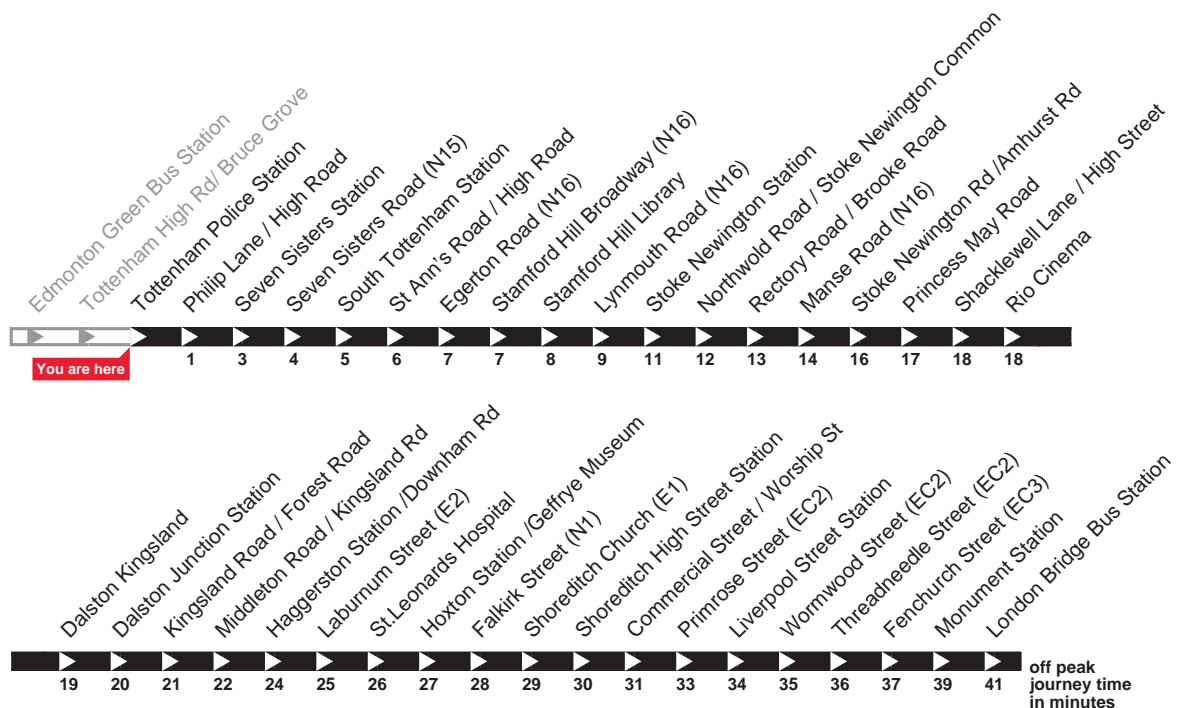
Operated by Arriva London for London Buses

# London Buses

# 149



Buses towards London Bridge Bus Station



Sunday									
Midnight to 00:30am	00:30 to 1am	1 to 2am	2 to 3am	3 to 4am	4 to 5am	5 to 6am	6 to 7am	7am to 11pm	11pm to Midnight
00 17	00 47	01 17 01 47	02 17 02 49	03 21 03 53	04 10 04 30 04 50	05 10 05 30 05 45	about every <b>12-14</b> minutes	about every <b>6-10</b> minutes	23 06 23 14 23 22 23 30 23 38 23 46 23 54

Operated by Arriva London for London Buses

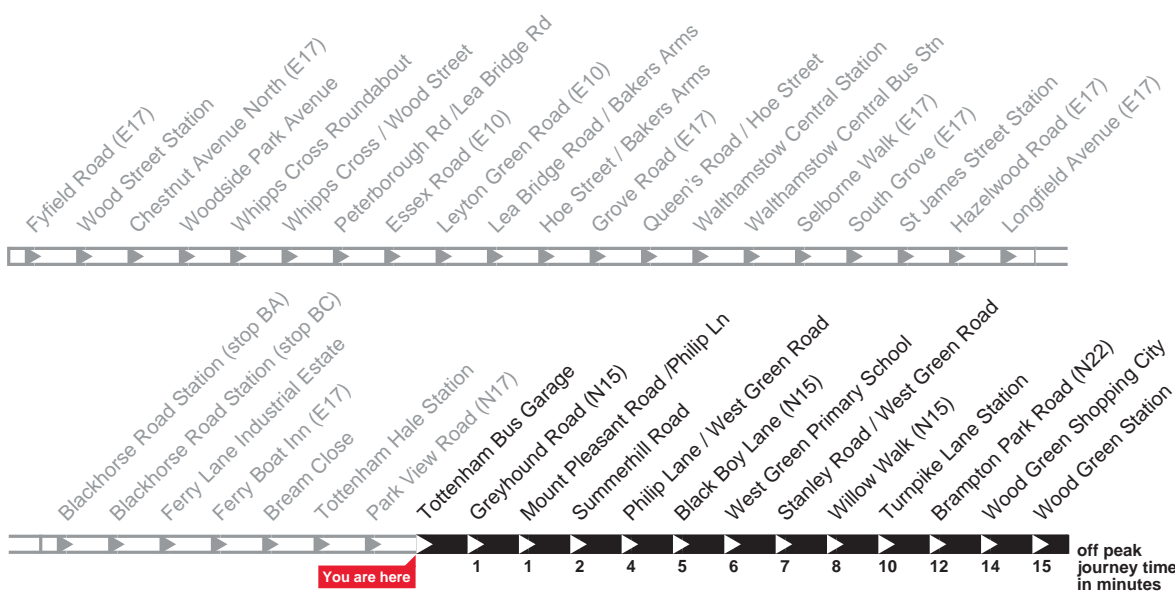
# London Buses

# 230

Daily



Buses towards Wood Green Station



Monday to Friday												
First buses	6 to 7am		7 to 10am			10am to 9pm			9 to 10pm	10 to 11pm	11pm to 1am	Last buses
05 22	06 02		about every			about every			21 09	22 06	At these 03	01 03
05 42	06 24		9-12			11-14			21 24	22 21	minutes 18	01 18
	06 47		minutes			minutes			21 38	22 35	past the 33	
									21 52	22 48	hour 48	

Saturday												
First buses	6 to 8am		8 to 9am	9am to 7pm			7 to 8pm	8 to 9pm	9 to 10pm	10 to 11pm	11pm to 1am	Last buses
05 22	At these 02	08 02	about every			19 08	20 10	21 09	22 06	At these 03	01 03	
05 42	minutes 22	08 22	12			19 19	20 24	21 24	22 21	minutes 18	01 18	
	past the 42	08 42	minutes			19 30	20 40	21 38	22 35	past the 33		
	hour	08 55				19 40	20 54	21 52	22 48	hour 48		
						19 55						

Sunday													
First bus	7 to 9am		9 to 10am	10 to 11am	11am to Midday	Midday to 6pm	6 to 7pm	7 to 8pm	8 to 9pm	9 to 10pm	10 to 11pm	11pm to 1am	Last buses
06 37	At these 07	09 07	10 12	11 12	At these 11	18 10	19 07	20 07	21 06	22 05	At these 03	01 03	
	minutes 37	09 28	10 27	11 27	minutes 26	18 24	19 22	20 22	21 20	22 20	minutes 18	01 18	
	past the	09 43	10 42	11 42	past the 41	18 37	19 37	20 37	21 35	22 35	past the 33		
	hour	09 58	10 57	11 56	hour 56	18 52	19 52	20 51	21 50	22 48	hour 48		

Operated by Arriva London for London Buses

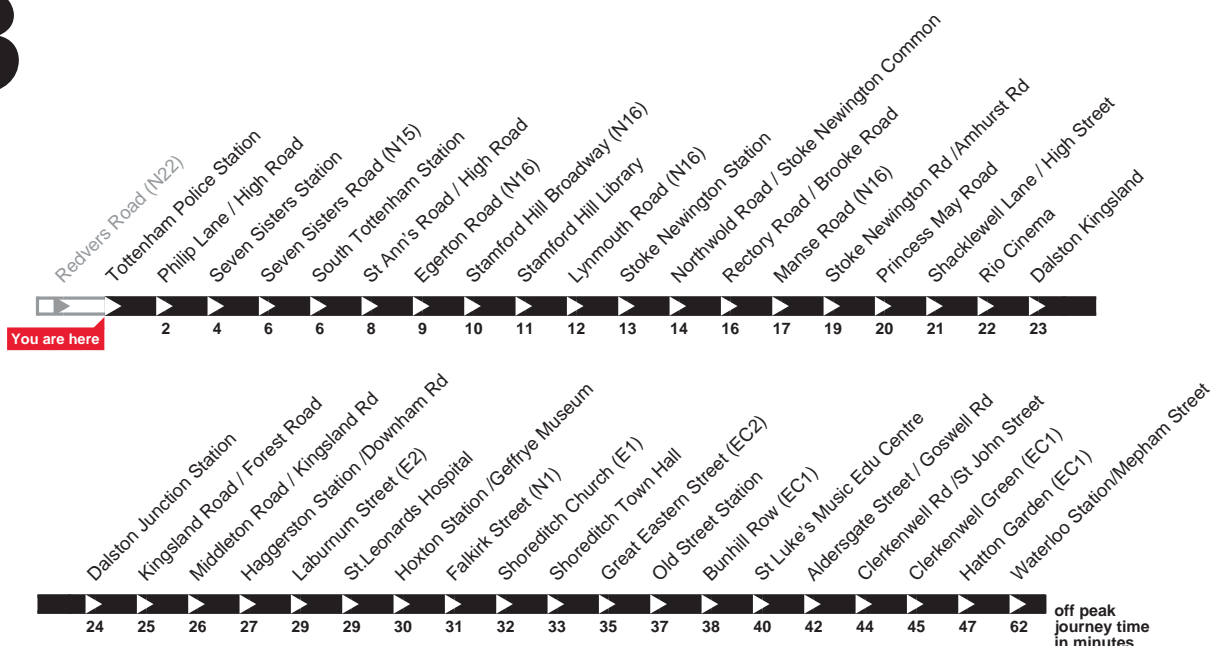
# London Buses

# 243

Daily



Buses towards Waterloo Station/Mepham Street



## Monday to Thursday

First buses	1 to 4am	4 to 5am	5 to 6am	6am to 7pm	7 to 8pm	8 to 11pm	Last buses
00 14 00 44	At these 14 minutes 44 past the hour	04 13 04 33 04 53	05 08 05 23 05 38 05 48 05 58	about every <b>5-9</b> minutes	about every <b>7-10</b> minutes	about every <b>10-12</b> minutes	23 11 23 23 23 35 23 47 23 59

## Friday

First buses	1 to 4am	4 to 5am	5 to 6am	6am to 7pm	7 to 8pm	8 to 11pm	Last buses
00 14 00 44	At these 14 minutes 44 past the hour	04 13 04 33 04 53	05 08 05 23 05 38 05 48 05 58	about every <b>5-9</b> minutes	about every <b>7-10</b> minutes	about every <b>10-12</b> minutes	23 01 23 10 23 22 23 35 23 47 23 59

## Saturday

First bus	5 to 6am	6 to 7am	7 to 8am	8am to 7pm	7pm to Midnight	Midnight to 3am	3 to 4am	Last buses
04 53	05 13 05 33 05 48	06 03 06 18 06 28 06 40 06 52	about every <b>10-12</b> minutes	about every <b>6-10</b> minutes	about every <b>9-13</b> minutes	At these 14 minutes 44 past the hour	03 14 03 43	04 13 04 33

## Sunday

First bus	5 to 7am	7 to 8am	8 to 9am	9am to 6pm	6pm to Midnight	Last bus
04 53	At these 13 minutes 33 past the 53 hour	07 10 07 25 07 37 07 49	about every <b>10-12</b> minutes	about every <b>7-11</b> minutes	about every <b>10-13</b> minutes	00 14

Operated by Arriva London for London Buses

# London Buses

# 259

Daily



Buses towards King's Cross Rd/Pentonville Rd



## Monday to Friday

First buses	5 to 6am	6am to 10pm	10pm to Midnight	Last bus
04 26	05 11	<i>about every</i>	<i>about every</i>	00 03
04 41	05 26	<b>6-10</b>	<b>9-11</b>	
04 56	05 38	<i>minutes</i>	<i>minutes</i>	
	05 48			
	05 58			

## Saturday

First buses	5 to 6am	6 to 9am	9am to 10pm	10pm to Midnight	Last bus
04 26	05 11	<i>about every</i>	<i>about every</i>	<i>about every</i>	00 03
04 41	05 26	<b>10-13</b>	<b>6-10</b>	<b>9-11</b>	
04 56	05 38	<i>minutes</i>	<i>minutes</i>	<i>minutes</i>	
	05 50				

## Sunday

First buses	5 to 6am	6 to 7am	7 to 8am	8am to Midnight	Last bus
04 26	05 11	06 11	07 13	<i>about every</i>	00 03
04 41	05 26	06 26	07 28	<b>8-12</b>	
04 56	05 41	06 41	07 43	<i>minutes</i>	
	05 56	06 57	07 55		

Operated by London General for London Buses



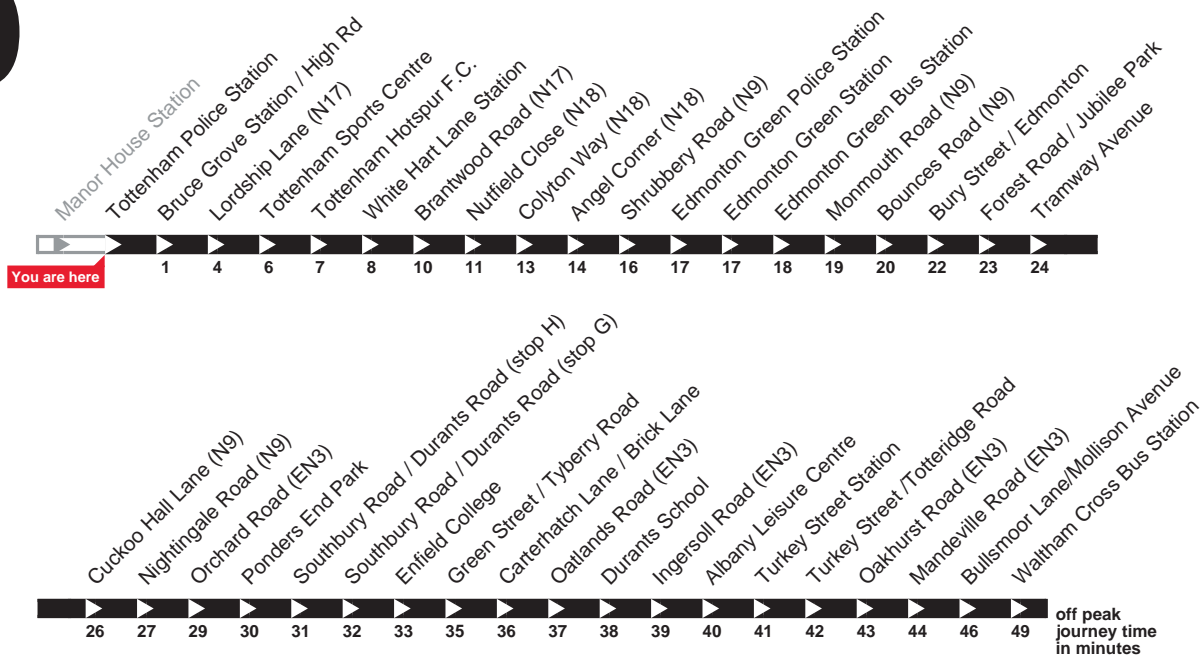
# London Buses

# 279

Daily



## Buses towards Waltham Cross Bus Station



### Monday to Thursday

First buses	7am to 8pm	8 to 9pm	9pm to Midnight	Last buses
06 10	about every	20 01	about every	00 04
06 20	<b>4-6</b>	20 06	<b>9-10</b>	00 14
06 29	minutes	20 13	minutes	00 24
06 37		20 20		00 34
06 45		20 27		00 44
06 52		20 35		00 54
06 59		20 45		
		20 55		

### Friday

First buses	7am to 8pm	8 to 9pm	9pm to Midnight	Last buses
06 10	about every	20 01	about every	00 04
06 20	<b>4-6</b>	20 06	<b>9-10</b>	00 14
06 29	minutes	20 13	minutes	00 24
06 37		20 20		00 34
06 45		20 27		00 44
06 52		20 35		00 54
06 59		20 45		
		20 55		

### Saturday

First buses	7 to 9am	9am to Midnight	Last buses
06 10	about every	about every	00 04
06 22	<b>10-12</b>	<b>6-10</b>	00 14
06 34	minutes	minutes	00 24
06 46			00 34
06 58			00 44
			00 54

### Sunday

First buses	7 to 9am	9 to 10am	10am to Midnight	Last buses
06 10	about every	09 01	about every	00 04
06 25	<b>12</b>	09 14	<b>8-10</b>	00 14
06 37	minutes	09 26	minutes	00 24
06 49		09 36		00 34
		09 46		00 44
		09 54		00 54

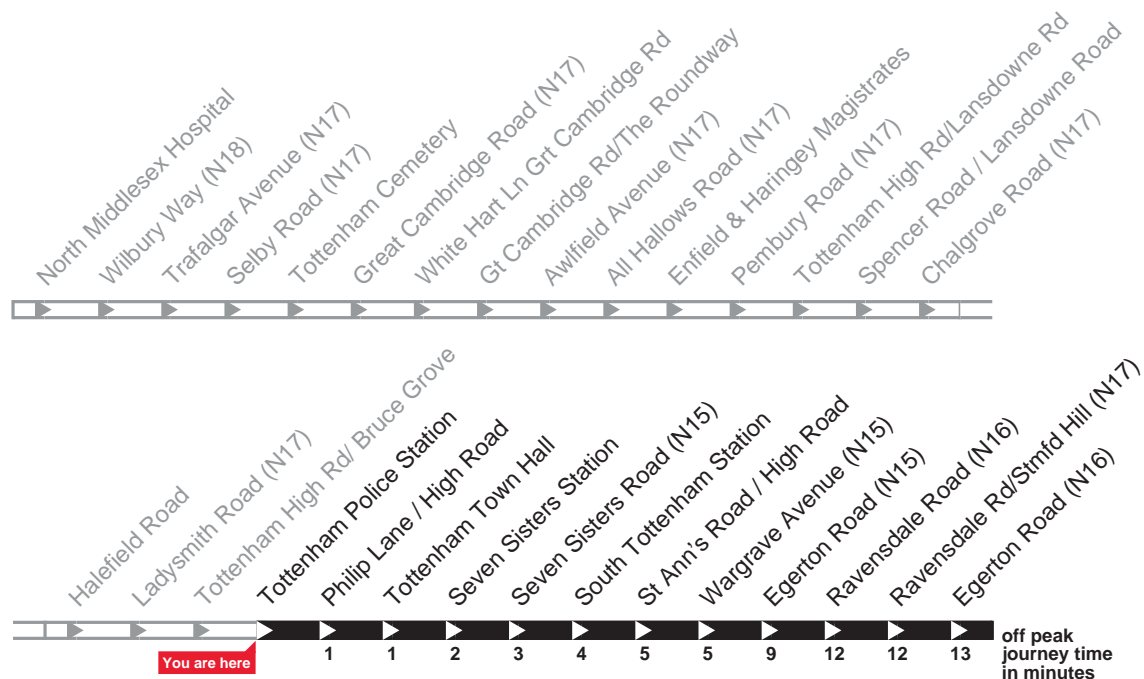
Operated by Arriva London for London Buses

# 318

Daily



## Buses towards Egerton Road (N16)



### Monday to Friday

First buses	7 to 8am	8 to 9am	9 to 10am	10am to 4pm	4 to 5pm	5 to 7pm	7 to 8pm	8 to 9pm	9pm to Midnight	Last buses
06 01	07 04	08 04	09 04	At these 03	16 03	At these 01	19 00	20 19	At these 09	00 09
06 23	07 19	08 19	09 18	minutes 18	16 18	minutes 16	19 13	20 39	minutes 39	00 39
06 44	07 34	08 34	09 32	past the 33	16 32	past the 31	19 26		past the	
	07 49	08 49	09 48	hour 48	16 46	hour 46	19 39	19 59	hour	

### Saturday

First buses	7 to 8am	8 to 9am	9 to 10am	10 to 11am	11am to 5pm	5 to 6pm	6 to 7pm	7 to 8pm	8 to 9pm	9pm to Midnight	Last buses
06 01	07 01	08 01	09 11	10 04	At these 03	17 02	18 01	19 06	20 05	At these 09	00 09
06 31	07 31	08 31	09 31	10 19	minutes 18	17 17	18 16	19 26	20 23	minutes 39	00 39
		08 51	09 49	10 34	past the 33	17 31	18 31	19 46	20 41	past the	
				10 48	hour 48	17 46	18 46			hour	

### Sunday

First buses	8 to 9am	9 to 10am	10 to 11am	11am to 6pm	6 to 7pm	7 to 8pm	8pm to Midnight	Last buses
07 01	08 01	09 03	10 16	At these 16	18 14	19 11	At these 09	00 09
07 31	08 31	09 36	10 36	minutes 36	18 41	19 39	minutes 39	00 39
		09 56	10 56	past the 56			past the	
				hour			hour	

Operated by Arriva London for London Buses

# 349

Daily



## Buses towards Egerton Road (N16)



### Monday to Friday

First buses	5 to 6am	6am to 8pm	8pm to Midnight	Last buses
0422	<i>about every</i>	<i>about every</i>	<i>about every</i>	0001
0434	<b>10-12</b>	<b>7-10</b>	<b>10-12</b>	0013
0446	<i>minutes</i>	<i>minutes</i>	<i>minutes</i>	0025
0458				

### Saturday

First buses	5 to 6am	6 to 7am	7 to 8am	8am to 8pm	8pm to Midnight	Last buses
0422	0507	0607	<i>about every</i>	<i>about every</i>	<i>about every</i>	0001
0437	0522	0622	<b>10-12</b>	<b>6-10</b>	<b>10-12</b>	0013
0452	0537	0635	<i>minutes</i>	<i>minutes</i>	<i>minutes</i>	0025
	0552	0649				

### Sunday

First buses	5 to 6am	6 to 7am	7am to Midnight	Last buses
0422	0507	0607	<i>about every</i>	0001
0437	0522	0622	<b>10-12</b>	0013
0452	0537	0636	<i>minutes</i>	0025
	0552	0651		

Operated by Arriva London for London Buses

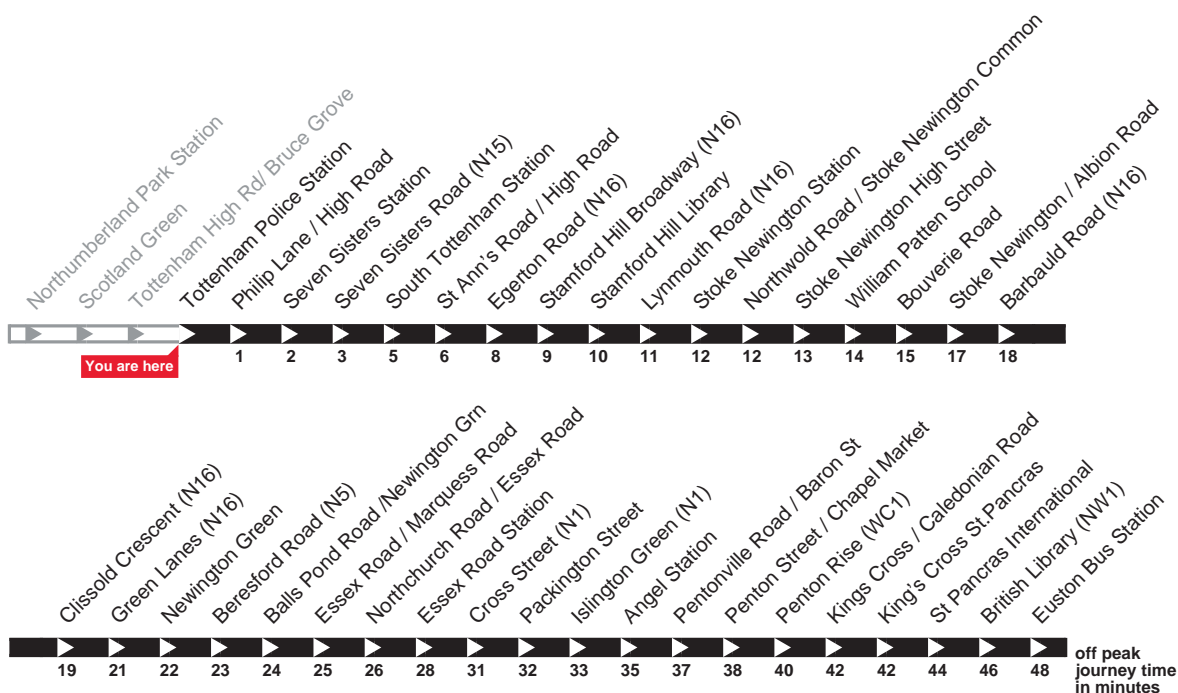
# London Buses

# 476

Daily



Buses towards Euston Bus Station



## Monday to Friday

First buses	6 to 7am	7 to 8am	8 to 9am	9am to 7pm	7 to 11pm	Last buses
0531 0543 0555	<i>about every</i> <b>7-10</b> <i>minutes</i>	<i>about every</i> <b>4-7</b> <i>minutes</i>	<i>about every</i> <b>5-9</b> <i>minutes</i>	<i>about every</i> <b>6-10</b> <i>minutes</i>	<i>about every</i> <b>9-12</b> <i>minutes</i>	2300 2312 2324 2335 2347

## Saturday

First buses	6 to 7am	7 to 8am	8 to 9am	9am to 6pm	6 to 11pm	Last buses
0531 0546	0601 0616 0631 0646	0701 0716 0731 0743 0755	<i>about every</i> <b>8-12</b> <i>minutes</i>	<i>about every</i> <b>7-8</b> <i>minutes</i>	<i>about every</i> <b>10-12</b> <i>minutes</i>	2300 2312 2324 2335 2347

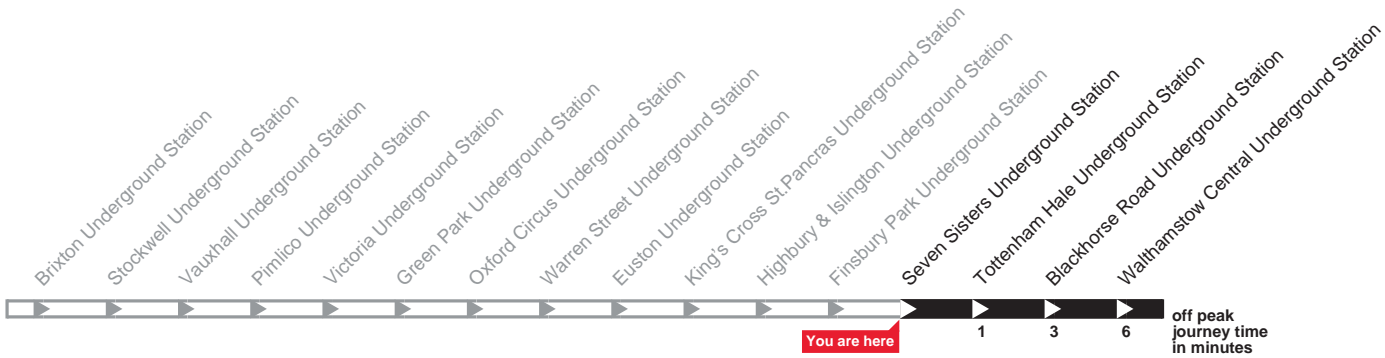
## Sunday

First buses	6 to 8am	8 to 9am	9am to 11pm	Last buses
0531 0546	At these 01 minutes 16 past the 31 hour 46	0801 0816 0831 0846 0858	<i>about every</i> <b>11-13</b> <i>minutes</i>	2300 2312 2324 2335 2347

Operated by London General for London Buses

Victor

Services from this station towards Walthamstow Central Underground Station



Monday - Friday

First trains	6 to 7am	7 to 8am	8 to 9am	9 to 10am	10 to 11am	11am to 1pm	1 to 2pm	2 to 3pm	3 to 4pm	4 to 5pm	5 to 6pm	6 to 7pm	7 to 8pm	8 to 10pm	10 to 11pm	11pm to Midnight	Last trains
05 26	06 07	07 02	08 01	09 02	10 00	At these minutes past the hour	02 13 02	14 02	15 02	16 03	17 00	18 01	19 00	At these minutes past the hour	02 22 03	23 00	00 08
05 42	06 14	07 06	08 04	09 06	10 04		05 13 05	14 05	15 05	16 06	17 03	18 04	19 03		05 22 07	23 06	00 18
05 52	06 21	07 10	08 08	09 08	10 07		09 13 09	14 09	15 09	16 09	17 06	18 08	19 06		09 22 12	23 11	00 28
06 26	07 13	08 11	09 12	10 11			12 13 13	14 12	15 12	16 13	17 09	18 11	19 10		12 22 17	23 18	00 38
06 30	07 15	08 15	09 15	10 15			15 13 15	14 15	15 15	16 16	17 13	18 14	19 13		15 22 22	23 24	00 43 A
06 34	07 18	08 19	09 19	10 19			19 13 19	14 19	15 19	16 19	17 16	18 17	19 17		19 22 27	23 31	00 43 B
06 38	07 23	08 23	09 22	10 22			22 13 22	14 22	15 22	16 22	17 20	18 21	19 21		22 22 32	23 38	00 55 A
06 43	07 25	08 26	09 26	10 25			25 13 25	14 25	15 25	16 26	17 24	18 24	19 25		25 22 37	23 44	00 55 B
06 47	07 28	08 29	09 30	10 29			29 13 29	14 29	15 29	16 29	17 27	18 27	19 28		29 22 42	23 52	
06 51	07 31	08 32	09 33	10 32			32 13 32	14 32	15 32	16 33	17 30	18 31	19 32		32 22 46	23 59	
06 55	07 35	08 36	09 36	10 35			35 13 35	14 35	15 35	16 35	17 33	18 34	19 35		35 22 50		
06 59	07 38	08 39	09 40	10 39			39 13 39	14 39	15 39	16 39	17 37	18 37	19 39		39 22 55		
	07 41	08 42	09 43	10 42			42 13 42	14 42	15 43	16 41	17 40	18 40	19 43		42		
	07 45	08 45	09 47	10 45			45 13 45	14 45	15 45	16 44	17 44	18 43	19 45		45		
	07 48	08 49	09 51	10 49			49 13 49	14 49	15 49	16 47	17 48	18 46	19 49		49		
	07 51	08 52	09 53	10 52			52 13 52	14 52	15 52	16 50	17 51	18 50	19 52		52		
	07 54	08 55	09 57	10 55			55 13 55	14 55	15 55	16 53	17 54	18 54	19 55		55		
	07 58	08 59		10 59			59 13 59	14 59	15 59	16 57	17 57	18 57	19 59		59		

A = to 28.11.13, not 25.1.13, 1.2., 8.2., 15.2., 22.2., 1.3., 8.3., 15.3., 22.3., 5.4., 12.4., 19.4., 26.4., 3.5., 10.5., 17.5., 24.5., 31.5., 7.6., 14.6., 21.6., 28.6., 5.7., 12.7., 19.7., 26.7., 2.8., 9.8., 16.8., 23.8., 30.8., 6.9., 13.9., 20.9., 27.9., 4.10., 11.10., 18.10., 25.10., 1.11., 8.11., 15.11., 22.11.  
B = only 4.10.13, 11.10., 18.10., 25.10., 1.11., 8.11., 15.11., 22.11., 29.11.

Sunday

First trains	8 to 9am	9 to 10am	10 to 11am	11am to 2pm	2 to 5pm	5 to 6pm	6 to 9pm	9 to 10pm	10 to 11pm	11pm to Midnight	Last trains
07 17	08 05	09 01	10 01	At these minutes past the hour	02 17 02	17 02	At these minutes past the hour	02 21 02	22 02	23 02	00 05
07 27	08 14	09 06	10 05		05 17 05	17 05		05 21 05	22 07	23 13	00 18
07 33	08 19	09 12	10 08		09 17 09	17 09		09 21 09	22 12	23 25	
07 36	08 24	09 16	10 12		12 17 12	17 12		12 21 12	22 17	23 37	
07 49	08 28	09 21	10 16		15 17 15	17 15		15 21 15	22 23	23 50	
07 54	08 32	09 25	10 22		19 17 19	17 19		19 21 19	22 30		
07 59	08 38	09 28	10 25		22 17 22	17 22		22 21 23	22 36		
	08 44	09 32	10 29		25 17 25	17 25		25 21 28	22 42		
	08 48	09 36	10 32		29 17 29	17 29		29 21 32	22 52		
	08 51	09 41	10 35		32 17 32	17 32		32 21 37			
	08 56	09 44	10 39		35 17 35	17 35		35 21 42			
		09 48	10 42		39 17 38	17 38		39 21 47			
		09 52	10 45		42 17 42	17 42		42 21 52			
		09 56	10 49		45 17 45	17 45		45 21 58			
			10 52		49 17 49	17 49		49			
			10 55		52 17 52	17 52		52			
			10 58		55 17 55	17 55		55			
					59 17 58	17 58		59			

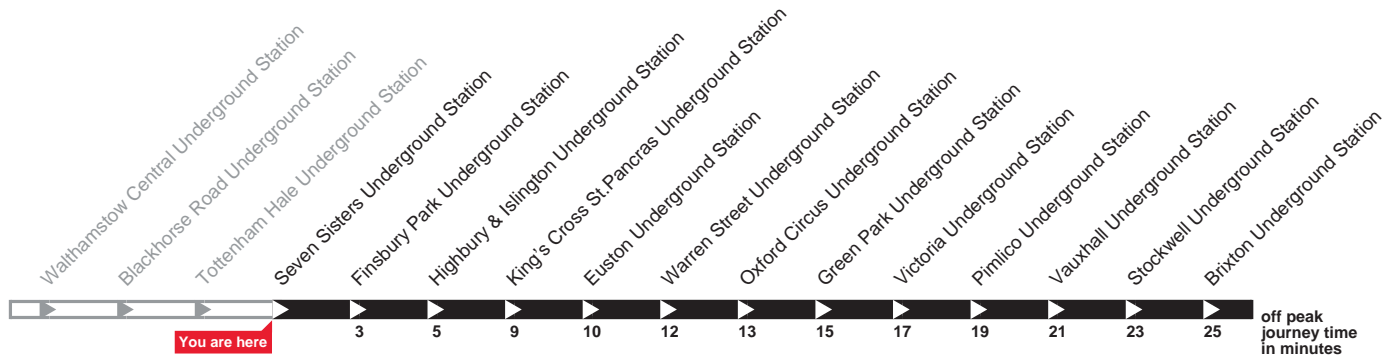
Saturdays and Public Holidays

First trains	6 to 7am	7 to 8am	8 to 9am	9am to 4pm	4 to 5pm	5 to 6pm	6 to 10pm	10 to 11pm	11pm to Midnight	Last trains
05 26	06 07	07 06	08 05	At these minutes past the hour	02 16 02	17 02	At these minutes past the hour	02 22 03	23 00	00 08
05 43	06 14	07 10	08 09		05 16 05	17 05		05 22 07	23 06	00 18
05 52	06 21	07 15	08 15		09 16 09	17 08		09 22 12	23 11	00 28
	06 26	07 19	08 19		12 16 12	17 12		12 22 17	23 18	00 38
	06 30	07 23	08 24		15 16 15	17 15		15 22 22	23 24	00 43
	06 35	07 29	08 28		19 16 18	17 19		19 22 27	23 31	00 55
	06 41	07 35	08 32		22 16 22	17 22		22 22 32	23 38	
	06 48	07 39	08 36		25 16 25	17 25		25 22 37	23 44	
	06 53	07 45	08 40		29 16 29	17 29		29 22 42	23 52	
	06 58	07 49	08 44		32 16 32	17 32		32 22 46	23 59	
		07 55	08 47		35 16 35	17 35		35 22 50		
		07 59	08 51		39 16 39	17 39		39 22 55		
			08 55		42 16 42	17 42		42		
			08 58		45 16 45	17 45		45		
					49 16 49	17 49		49		
					52 16 52	17 52		52		
					55 16 55	17 55		55		
					59 16 59	17 59		59		



# Victor

Services from this station towards Brixton Underground Station



## Monday - Friday

First trains	6 to 7am	7 to 8am	8 to 9am	9 to 10am	10am to Midday	Midday to 1pm	1 to 2pm	2 to 3pm	3 to 4pm	4 to 5pm	5 to 6pm	6 to 7pm	7 to 8pm	8 to 10pm	10 to 11pm	11pm to Midnight	Last trains
05 21	06 02	07 01	08 00	09 01	At these minutes 00	12 00	13 00	14 00	15 00	16 00	17 01	18 00	19 00	At these minutes 00	22 00	23 02	00 05
05 26 A	06 05	07 03	08 02	09 03	past the hour 03	12 02	13 03	14 02	15 03	16 02	17 02	18 02	19 02	past the hour 03	22 03	23 06	00 16
05 31	06 09	07 05	08 03	09 05	05	12 04	13 05	14 04	15 05	16 04	17 04	18 04	19 05	05	22 05	23 11	
05 36	06 12	07 07	08 05	09 07	08	12 06	13 08	14 06	15 07	16 06	17 06	18 06	19 07	08	22 08	23 15	
05 41	06 15	07 08	08 07	09 09	10	12 10	13 10	14 10	15 10	16 08	17 08	18 08	19 10	10	22 10	23 20	
05 46	06 18	07 10	08 09	09 11	13	12 13	13 13	14 13	15 12	16 10	17 10	18 10	19 12	13	22 13	23 25	
05 50	06 21	07 12	08 11	09 14	15	12 15	13 15	14 15	15 15	16 12	17 12	18 12	19 15	15	22 15	23 30	
05 54	06 23	07 14	08 13	09 16	18	12 18	13 18	14 18	15 17	16 14	17 13	18 14	19 17	18	22 18	23 35	
05 58	06 26	07 16	08 14	09 18	20	12 20	13 20	14 20	15 20	16 16	17 15	18 16	19 20	20	22 22	23 40	
	06 28	07 18	08 16	09 20	23	12 23	13 23	14 23	15 22	16 18	17 17	18 18	19 22	23	22 25	23 45	
	06 31	07 20	08 18	09 22	25	12 25	13 25	14 25	15 25	16 20	17 19	18 20	19 25	25	22 28	23 50	
	06 33	07 21	08 20	09 24	28	12 28	13 28	14 28	15 27	16 22	17 21	18 22	19 27	28	22 32	23 55	
	06 36	07 23	08 22	09 26	30	12 30	13 30	14 30	15 30	16 24	17 23	18 24	19 30	30	22 35		
	06 38	07 25	08 24	09 28	33	12 33	13 33	14 33	15 32	16 26	17 24	18 26	19 32	33	22 38		
	06 41	07 27	08 25	09 30	35	12 35	13 35	14 35	15 35	16 28	17 26	18 28	19 35	35	22 42		
	06 43	07 29	08 27	09 32	38	12 38	13 38	14 38	15 37	16 29	17 28	18 30	19 38	38	22 45		
	06 45	07 30	08 29	09 34	40	12 40	13 40	14 40	15 40	16 31	17 30	18 32	19 40	40	22 48		
	06 48	07 32	08 31	09 37	43	12 43	13 43	14 43	15 42	16 33	17 32	18 34	19 43	43	22 52		
	06 50	07 34	08 33	09 39	45	12 45	13 45	14 45	15 44	16 35	17 34	18 36	19 45	45	22 55		
	06 53	07 36	08 35	09 42	48	12 48	13 48	14 48	15 46	16 37	17 36	18 38	19 48	48	22 59		
	06 55	07 38	08 37	09 44	50	12 50	13 50	14 50	15 49	16 39	17 38	18 40	19 50	50			
	06 57	07 40	08 39	09 47	53	12 53	13 53	14 53	15 51	16 40	17 40	18 42	19 53	53			
	06 59	07 41	08 41	09 50	55	12 55	13 55	14 55	15 53	16 42	17 42	18 44	19 55	55			
		07 43	08 43	09 52	58	12 58	13 58	14 58	15 54	16 44	17 44	18 46	19 58	58			
		07 45	08 45	09 55					15 56	16 46	17 46	18 48					
		07 47	08 47	09 58					15 58	16 48	17 48	18 50					
		07 49	08 49							16 50	17 50	18 52					
		07 51	08 51							16 51	17 52	18 55					
		07 52	08 53							16 53	17 54	18 57					
		07 54	08 55							16 55	17 56						
		07 56	08 57							16 57	17 58						
		07 58	08 59							16 59							

A = to Victoria Underground Station

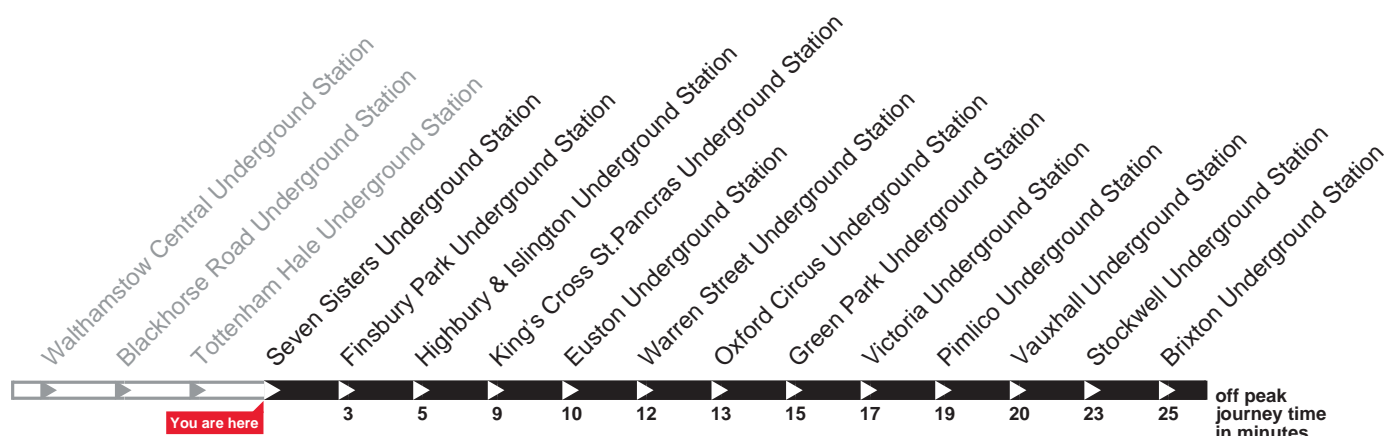
## Sunday

First train	7 to 8am	8 to 9am	9 to 10am	10am to 9pm	9 to 10pm	10 to 11pm	Last trains
06 54	07 00	08 02	09 02	At these minutes 00	21 00	22 03	23 01
	07 06	08 05	09 05	03	21 03	22 07	23 06
	07 11	08 09	09 09	05	21 05	22 11	23 11
	07 16	08 12	09 12	08	21 08	22 15	23 18
	07 21	08 15	09 15	10	21 10	22 19	23 25
	07 26	08 19	09 19	13	21 13	22 23	23 35
	07 31	08 22	09 22	15	21 15	22 27	
	07 36	08 25	09 25	18	21 18	22 32	
	07 40	08 29	09 29	20	21 20	22 36	
	07 44	08 32	09 32	23	21 23	22 41	
	07 48	08 35	09 35	25	21 25	22 46	
	07 52	08 39	09 38	28	21 28	22 51	
	07 55	08 42	09 41	30	21 30	22 56	
	07 59	08 45	09 43	33	21 33		
		08 49	09 46	35	21 36		
		08 52	09 48	38	21 40		
		08 55	09 50	40	21 43		
		08 59	09 53	43	21 47		
			09 55	45	21 51		
			09 58	48	21 55		
				50	21 59		
				53			
				55			
				58			

28.11.2013 Seven Sisters Underground Station

# Victor

## Services from this station towards Brixton Underground Station



### Saturdays and Public Holidays

First trains	6 to 7am	7 to 8am	8am to 10pm	10 to 11pm	11pm to Midnight	Last trains
05 21	06 00	07 02	At these minutes past the hour	00 22 00	23 02	00 05
05 26 A	06 05	07 05		03 22 03	23 06	00 16
05 31	06 09	07 08		05 22 05	23 11	
05 36	06 14	07 12		08 22 08	23 15	
05 41	06 18	07 15		10 22 10	23 20	
05 46	06 22	07 18		13 22 13	23 25	
05 51	06 25	07 22		15 22 16	23 30	
05 56	06 29	07 25		18 22 19	23 35	
	06 32	07 28		20 22 22	23 40	
	06 35	07 31		23 22 25	23 45	
	06 38	07 34		25 22 28	23 50	
	06 42	07 37		28 22 32	23 55	
	06 45	07 40		30 22 35		
	06 48	07 43		33 22 38		
	06 52	07 45		35 22 42		
	06 55	07 48		38 22 45		
	06 58	07 51		40 22 48		
		07 54		43 22 52		
		07 57		45 22 55		
			48 22 59			
			50			
			53			
			55			
			58			

A = to Victoria Underground Station

28.11.2013 Seven Sisters Underground Station

# PTAI Study Report File Summary

## PTAI Run Parameters

PTAI Run 20132811105022  
Description 20132811105022  
Run by user PTAL web application  
Date and time 28/11/2013 10:50

## Walk File Parameters

Walk File PLSQLTest  
Day of Week M-F  
Time Period AM Peak  
Walk Speed 4.8 kph  
BUS Walk Access Time (mins) 8  
BUS Reliability Factor 2.0  
LU LRT Walk Access Time (mins) 12  
LU LRT Reliability Factor 0.75  
NATIONAL\_RAIL Walk Access Time (mins) 12  
NATIONAL\_RAIL Reliability Factor 0.75

Coordinates: 533751, 189645

Mode	Stop	Route	Distance (metres)	Frequency (vph)	Weight	Walk time (mins)	SWT (mins)	TAT (mins)	EDF	AI
BUS	TOTTENHAM POLICE STATION	W4	44.31	6.0	0.5	0.55	7.0	7.55	3.97	1.99

BUS	TOTTENHAM POLICE STATION	476	44.31	7.5	0.5	0.55	6.0	6.55	4.58	2.29
BUS	TOTTENHAM POLICE STATION	279	44.31	10.0	0.5	0.55	5.0	5.55	5.4	2.7
BUS	TOTTENHAM POLICE STATION	318	44.31	3.0	0.5	0.55	12.0	12.55	2.39	1.19
BUS	TOTTENHAM POLICE STATION	259	44.31	8.0	0.5	0.55	5.75	6.3	4.76	2.38
BUS	TOTTENHAM POLICE STATION	349	44.31	7.5	0.5	0.55	6.0	6.55	4.58	2.29
BUS	TOTTENHAM POLICE STATION	243	44.31	11.0	0.5	0.55	4.73	5.28	5.68	2.84
BUS	TOTTENHAM POLICE STATION	341	44.31	6.0	0.5	0.55	7.0	7.55	3.97	1.99
BUS	MONUMENT WAY STANBY ROAD	41	143.76	12.0	0.5	1.8	4.5	6.3	4.76	2.38
BUS	TOTTENHAM SWAN	76	252.6	8.0	0.5	3.16	5.75	8.91	3.37	1.68
BUS	TOTTENHAM POLICE STATION	149	44.31	12.0	1.0	0.55	4.5	5.05	5.94	5.94
BUS	MONUMENT WAY STANBY ROAD	230	143.76	5.0	0.5	1.8	8.0	9.8	3.06	1.53

BUS	TOTTENHAM POLICE STATION	123	44.31	6.0	0.5	0.55	7.0	7.55	3.97	1.99
LU LRT	Tottenham Hale	Victoria Line Brixton to Walthamstow Central	892.66	15.7	1.0	11.16	2.66	13.82	2.17	2.17
NATIONAL_RAIL	BRUCE GROVE BR	LONDON LIVERPOOL STREET BR to ENFIELD TOWN BR	454.2	3.33	1.0	5.68	9.76	15.44	1.94	1.94
NATIONAL_RAIL	BRUCE GROVE BR	LONDON LIVERPOOL STREET BR to CHESHUNT ENFIELD TOWN BR	454.2	1.33	0.5	5.68	23.31	28.98	1.04	0.52
NATIONAL_RAIL	BRUCE GROVE BR	to LONDON LIVERPOOL STREET BR	454.2	2.0	0.5	5.68	15.75	21.43	1.4	0.7
NATIONAL_RAIL	BRUCE GROVE BR	CHESHUNT to LONDON LIVERPOOL STREET BR	454.2	2.0	0.5	5.68	15.75	21.43	1.4	0.7
NATIONAL_RAIL	TOTTENHAM HALE BR	STANSTED AIRPORT to LONDON LIVERPOOL STREET BR	892.66	0.33	0.5	11.16	91.66	102.82	0.29	0.15
NATIONAL_RAIL	TOTTENHAM HALE BR	HERTFORD EAST to STRATFORD	892.66	0.33	0.5	11.16	91.66	102.82	0.29	0.15
NATIONAL_RAIL	TOTTENHAM HALE BR	STRATFORD to HERTFORD EAST	892.66	0.33	0.5	11.16	91.66	102.82	0.29	0.15
NATIONAL_RAIL	TOTTENHAM HALE BR	LONDON LIVERPOOL STREET BR to STANSTED AIRPORT	892.66	4.0	0.5	11.16	8.25	19.41	1.55	0.77



NATIONAL_RAIL	TOTTENHAM HALE BR	STANSTED AIRPORT to LONDON LIVERPOOL STREET BR	892.66	0.33	0.5	11.16	91.66	102.82	0.29	0.15
NATIONAL_RAIL	TOTTENHAM HALE BR	HERTFORD EAST to LONDON LIVERPOOL STREET BR	892.66	2.0	0.5	11.16	15.75	26.91	1.11	0.56
NATIONAL_RAIL	TOTTENHAM HALE BR	STRATFORD to BROXBOURNE	892.66	0.33	0.5	11.16	91.66	102.82	0.29	0.15
NATIONAL_RAIL	TOTTENHAM HALE BR	STRATFORD to BISHOPS STORTFORD	892.66	1.0	0.5	11.16	30.75	41.91	0.72	0.36
NATIONAL_RAIL	TOTTENHAM HALE BR	Cambridge to LONDON LIVERPOOL STREET BR	892.66	2.3	0.5	11.16	13.79	24.95	1.2	0.6
NATIONAL_RAIL	TOTTENHAM HALE BR	HERTFORD EAST to STRATFORD	892.66	0.33	0.5	11.16	91.66	102.82	0.29	0.15

Total AI for this POI is 40.41.

PTAL Rating is 6b.

## **Appendix 4 TRICS Data**

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## TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL  
 Category : C - FLATS PRIVATELY OWNED  
 MULTI-MODAL VEHICLES

Selected regions and areas:

01	GREATER LONDON	
CN	CAMDEN	1 days
HG	HARINGEY	1 days
HK	HACKNEY	1 days
IS	ISLINGTON	1 days
KI	KINGSTON	1 days
KN	KENSINGTON AND CHELSEA	3 days
RD	RICHMOND	1 days
TH	TOWER HAMLETS	2 days
WH	WANDSWORTH	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

## Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Number of dwellings  
 Actual Range: 9 to 294 (units: )  
 Range Selected by User: 9 to 294 (units: )

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/05 to 11/05/12

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	3 days
Tuesday	4 days
Wednesday	2 days
Thursday	1 days
Friday	2 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	12 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Town Centre	1
Edge of Town Centre	5
Suburban Area (PPS6 Out of Centre)	6

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	9
Built-Up Zone	2
No Sub Category	1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Filtering Stage 3 selection:

Use Class:

C1	1 days
C3	11 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

5,001 to 10,000	1 days
10,001 to 15,000	2 days
25,001 to 50,000	2 days
50,001 to 100,000	6 days
101,000 or More	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

125,001 to 250,000	1 days
250,001 to 500,000	1 days
500,001 or More	10 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.5 or Less	5 days
0.6 to 1.0	6 days
1.1 to 1.5	1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No	12 days
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This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

1	CN-03-C-01	BLOCK OF FLATS OVAL ROAD			CAMDEN
		REGENTS PARK Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 12 Survey date: FRIDAY 07/11/08			Survey Type: MANUAL
2	HG-03-C-01	BLOCK OF FLATS CHADWELL LANE NEW RIVER VILLAGE HORNSEY Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 25 Survey date: TUESDAY 27/10/09			HARINGEY Survey Type: MANUAL
3	HK-03-C-02	BLOCK OF FLATS HOXTON			HACKNEY Survey Type: MANUAL
		SHOREDITCH Town Centre Built-Up Zone Total Number of dwellings: 9 Survey date: TUESDAY 11/11/08			ISLINGTON Survey Type: MANUAL
4	IS-03-C-01	FLATS RAMSEY WALK			ISLINGTON
		ISLINGTON Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 31 Survey date: TUESDAY 04/11/08			KINGSTON Survey Type: MANUAL
5	KI-03-C-02	BLOCK OF FLATS SOPWITH WAY			KINGSTON
		KINGSTON UPON THAMES Edge of Town Centre No Sub Category Total Number of dwellings: 132 Survey date: MONDAY 14/06/10			KENSINGTON AND CHELSEA Survey Type: MANUAL
6	KN-03-C-01	BLOCKS OF FLATS UXBRIDGE STREET			KENSINGTON AND CHELSEA
		NOTTING HILL Edge of Town Centre Residential Zone Total Number of dwellings: 16 Survey date: THURSDAY 15/10/09			KENSINGTON AND CHELSEA Survey Type: MANUAL
7	KN-03-C-02	BLOCK OF FLATS BECKFORD CLOSE			KENSINGTON AND CHELSEA
		SOUTH KENSINGTON Edge of Town Centre Residential Zone Total Number of dwellings: 294 Survey date: TUESDAY 15/06/10			KENSINGTON AND CHELSEA Survey Type: MANUAL



LIST OF SITES relevant to selection parameters (Cont.)

8	KN-03-C-03	BLOCK OF FLATS		KENSINGTON AND CHELSEA
	ALLEN STREET			
	KENSINGTON			
	Edge of Town Centre			
	Residential Zone			
	Total Number of dwellings:	72		
	Survey date: FRIDAY	11/05/12		Survey Type: MANUAL
9	RD-03-C-02	BLOCK OF FLATS		RICHMOND
	B306 QUEENS RIDE			
	BARNES			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:	28		
	Survey date: MONDAY	29/01/07		Survey Type: MANUAL
10	TH-03-C-02	FLATS		TOWER HAMLETS
	BURNHAM STREET			
	BETHNAL GREEN			
	Suburban Area (PPS6 Out of Centre)			
	Built-Up Zone			
	Total Number of dwellings:	24		
	Survey date: MONDAY	10/11/08		Survey Type: MANUAL
11	TH-03-C-03	FLATS		TOWER HAMLETS
	PALMERS ROAD			
	BETHNAL GREEN			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:	69		
	Survey date: WEDNESDAY	12/11/08		Survey Type: MANUAL
12	WH-03-C-01	BLOCKS OF FLATS		WANDSWORTH
	AMIES STREET			
	CLAPHAM JUNCTION			
	Edge of Town Centre			
	Residential Zone			
	Total Number of dwellings:	30		
	Survey date: WEDNESDAY	09/05/12		Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

OFF-LINE VERSION

Licence No: 142301

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	12	62	0.016	12	62	0.080	12	62	0.096
08:00 - 09:00	12	62	0.061	12	62	0.147	12	62	0.208
09:00 - 10:00	12	62	0.067	12	62	0.067	12	62	0.134
10:00 - 11:00	12	62	0.027	12	62	0.043	12	62	0.070
11:00 - 12:00	12	62	0.059	12	62	0.043	12	62	0.102
12:00 - 13:00	12	62	0.050	12	62	0.057	12	62	0.107
13:00 - 14:00	12	62	0.038	12	62	0.040	12	62	0.078
14:00 - 15:00	12	62	0.035	12	62	0.046	12	62	0.081
15:00 - 16:00	12	62	0.070	12	62	0.050	12	62	0.120
16:00 - 17:00	12	62	0.051	12	62	0.038	12	62	0.089
17:00 - 18:00	12	62	0.084	12	62	0.046	12	62	0.130
18:00 - 19:00	12	62	0.080	12	62	0.061	12	62	0.141
19:00 - 20:00	1	294	0.071	1	294	0.058	1	294	0.129
20:00 - 21:00	1	294	0.054	1	294	0.034	1	294	0.088
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.763			0.810			1.573

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

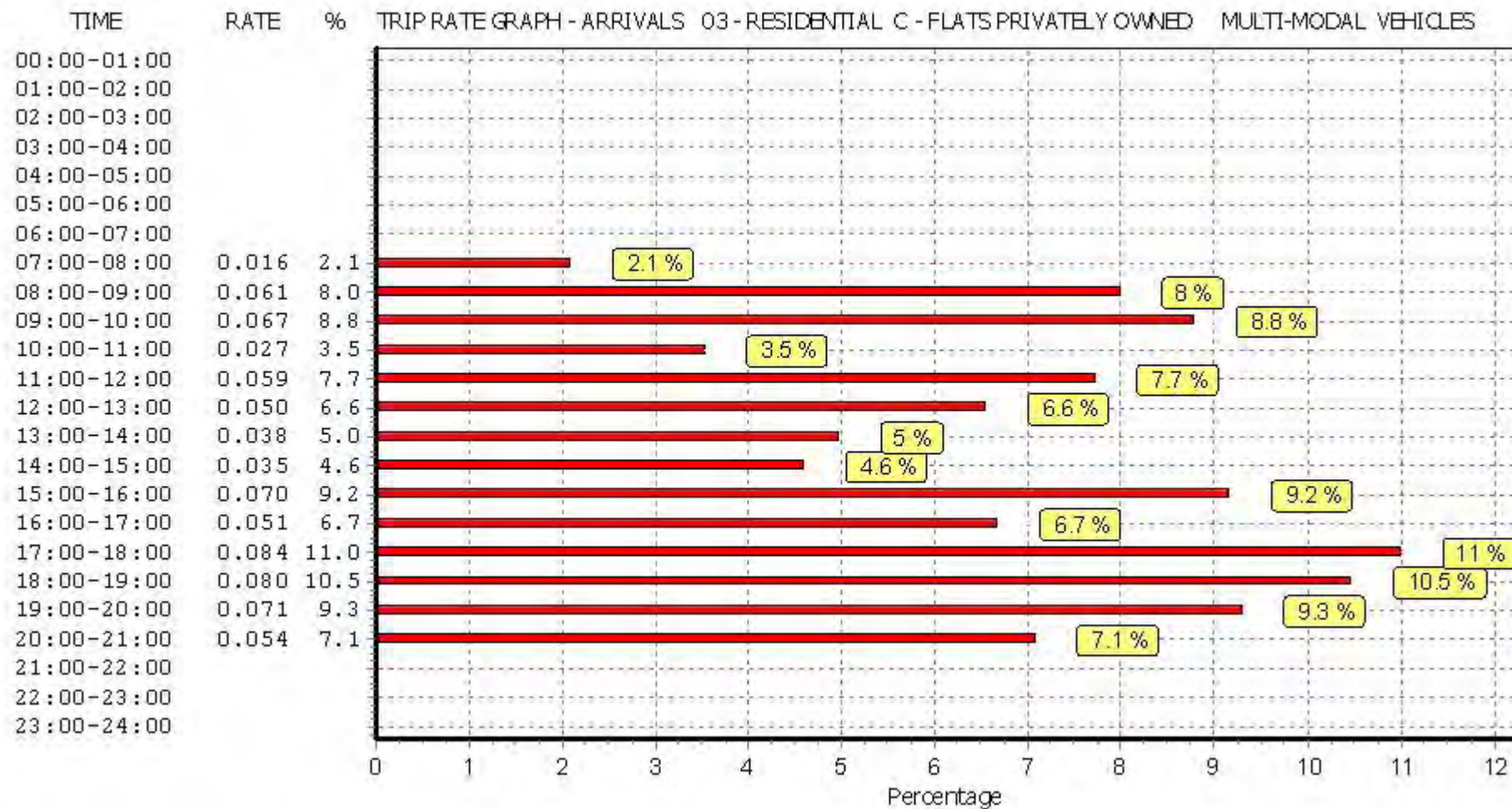
#### Parameter summary

Trip rate parameter range selected: 9 - 294 (units: )  
 Survey date range: 01/01/05 - 11/05/12  
 Number of weekdays (Monday-Friday): 12  
 Number of Saturdays: 0  
 Number of Sundays: 0  
 Surveys manually removed from selection: 0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

OFF-LINE VERSION

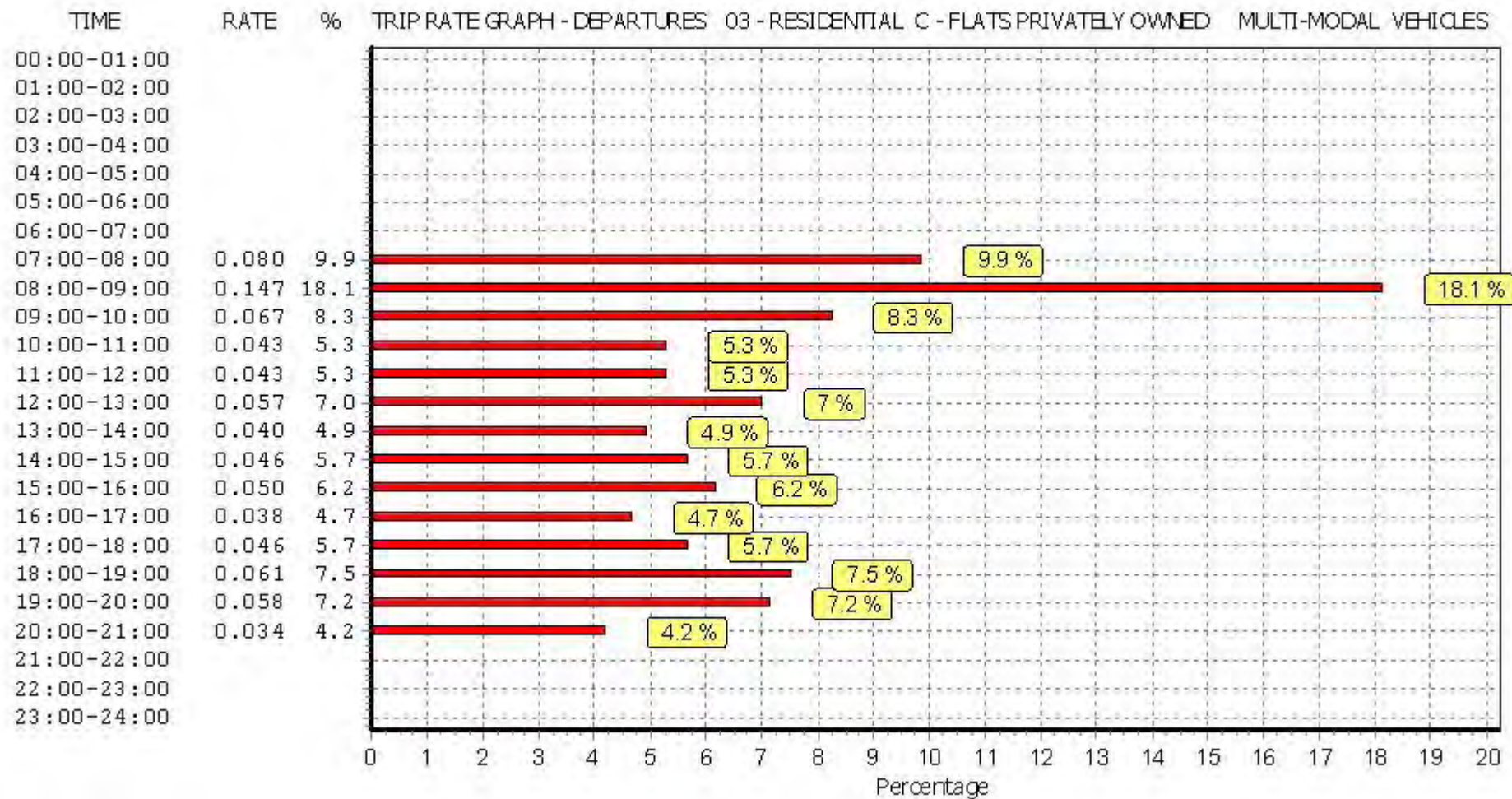
Licence No: 142301



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

OFF-LINE VERSION

Licence No: 142301

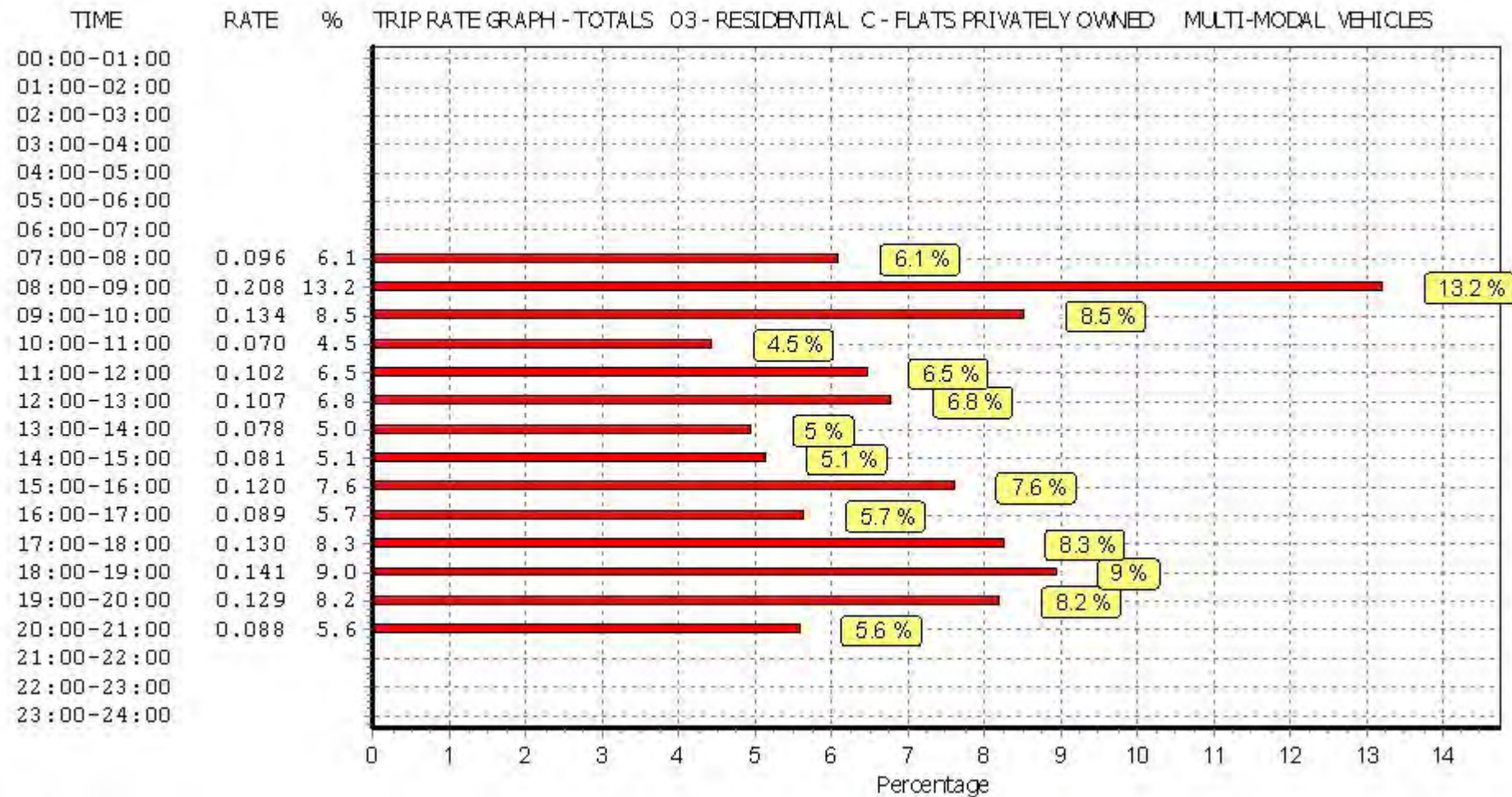


This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



OFF-LINE VERSION

Licence No: 142301



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



OFF-LINE VERSION

Licence No: 142301

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL TAXIS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	12	62	0.003	12	62	0.003	12	62	0.006
08:00 - 09:00	12	62	0.013	12	62	0.013	12	62	0.026
09:00 - 10:00	12	62	0.012	12	62	0.012	12	62	0.024
10:00 - 11:00	12	62	0.003	12	62	0.003	12	62	0.006
11:00 - 12:00	12	62	0.004	12	62	0.004	12	62	0.008
12:00 - 13:00	12	62	0.008	12	62	0.008	12	62	0.016
13:00 - 14:00	12	62	0.000	12	62	0.000	12	62	0.000
14:00 - 15:00	12	62	0.003	12	62	0.003	12	62	0.006
15:00 - 16:00	12	62	0.008	12	62	0.008	12	62	0.016
16:00 - 17:00	12	62	0.009	12	62	0.007	12	62	0.016
17:00 - 18:00	12	62	0.004	12	62	0.007	12	62	0.011
18:00 - 19:00	12	62	0.004	12	62	0.004	12	62	0.008
19:00 - 20:00	1	294	0.007	1	294	0.007	1	294	0.014
20:00 - 21:00	1	294	0.010	1	294	0.010	1	294	0.020
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.088			0.089			0.177

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

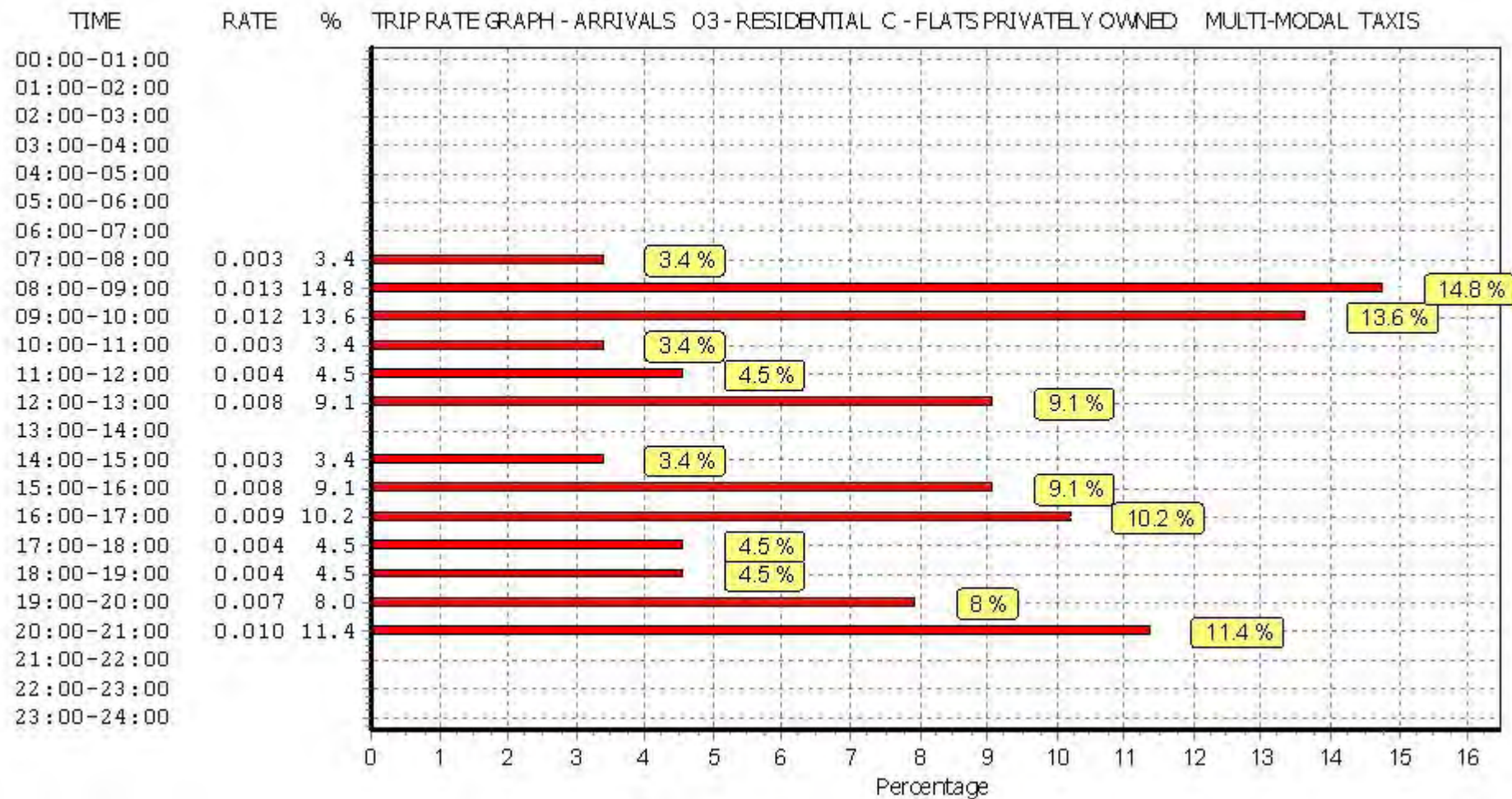
#### Parameter summary

Trip rate parameter range selected: 9 - 294 (units: )  
 Survey date range: 01/01/05 - 11/05/12  
 Number of weekdays (Monday-Friday): 12  
 Number of Saturdays: 0  
 Number of Sundays: 0  
 Surveys manually removed from selection: 0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

OFF-LINE VERSION

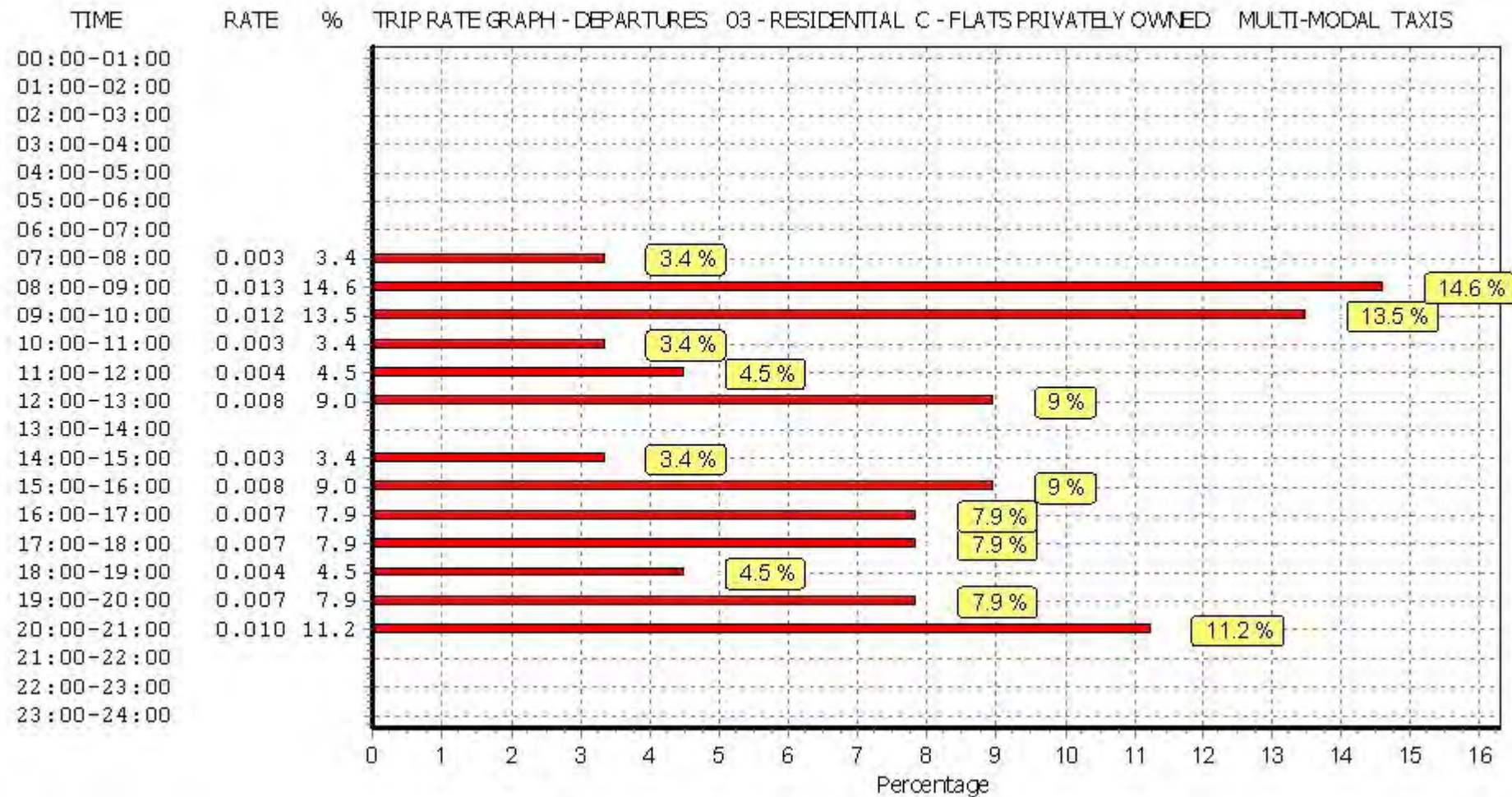
Licence No: 142301



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

OFF-LINE VERSION

Licence No: 142301

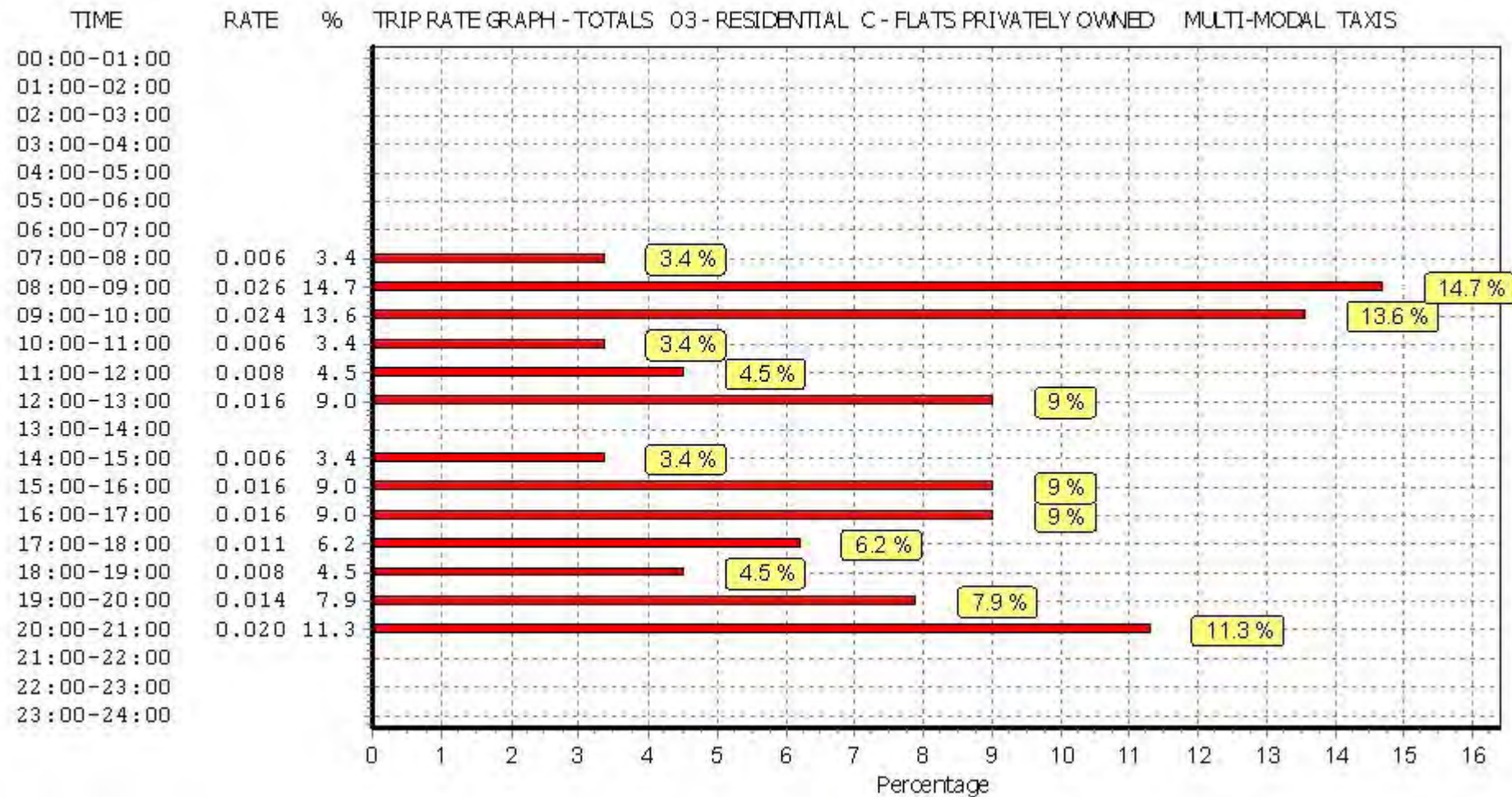


This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



OFF-LINE VERSION

Licence No: 142301



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

OFF-LINE VERSION

Licence No: 142301

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL OGVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	12	62	0.001	12	62	0.001	12	62	0.002
08:00 - 09:00	12	62	0.000	12	62	0.000	12	62	0.000
09:00 - 10:00	12	62	0.000	12	62	0.000	12	62	0.000
10:00 - 11:00	12	62	0.000	12	62	0.000	12	62	0.000
11:00 - 12:00	12	62	0.001	12	62	0.001	12	62	0.002
12:00 - 13:00	12	62	0.000	12	62	0.000	12	62	0.000
13:00 - 14:00	12	62	0.000	12	62	0.000	12	62	0.000
14:00 - 15:00	12	62	0.001	12	62	0.001	12	62	0.002
15:00 - 16:00	12	62	0.000	12	62	0.000	12	62	0.000
16:00 - 17:00	12	62	0.001	12	62	0.001	12	62	0.002
17:00 - 18:00	12	62	0.000	12	62	0.000	12	62	0.000
18:00 - 19:00	12	62	0.000	12	62	0.000	12	62	0.000
19:00 - 20:00	1	294	0.000	1	294	0.000	1	294	0.000
20:00 - 21:00	1	294	0.000	1	294	0.000	1	294	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.004			0.004			0.008

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

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#### Parameter summary

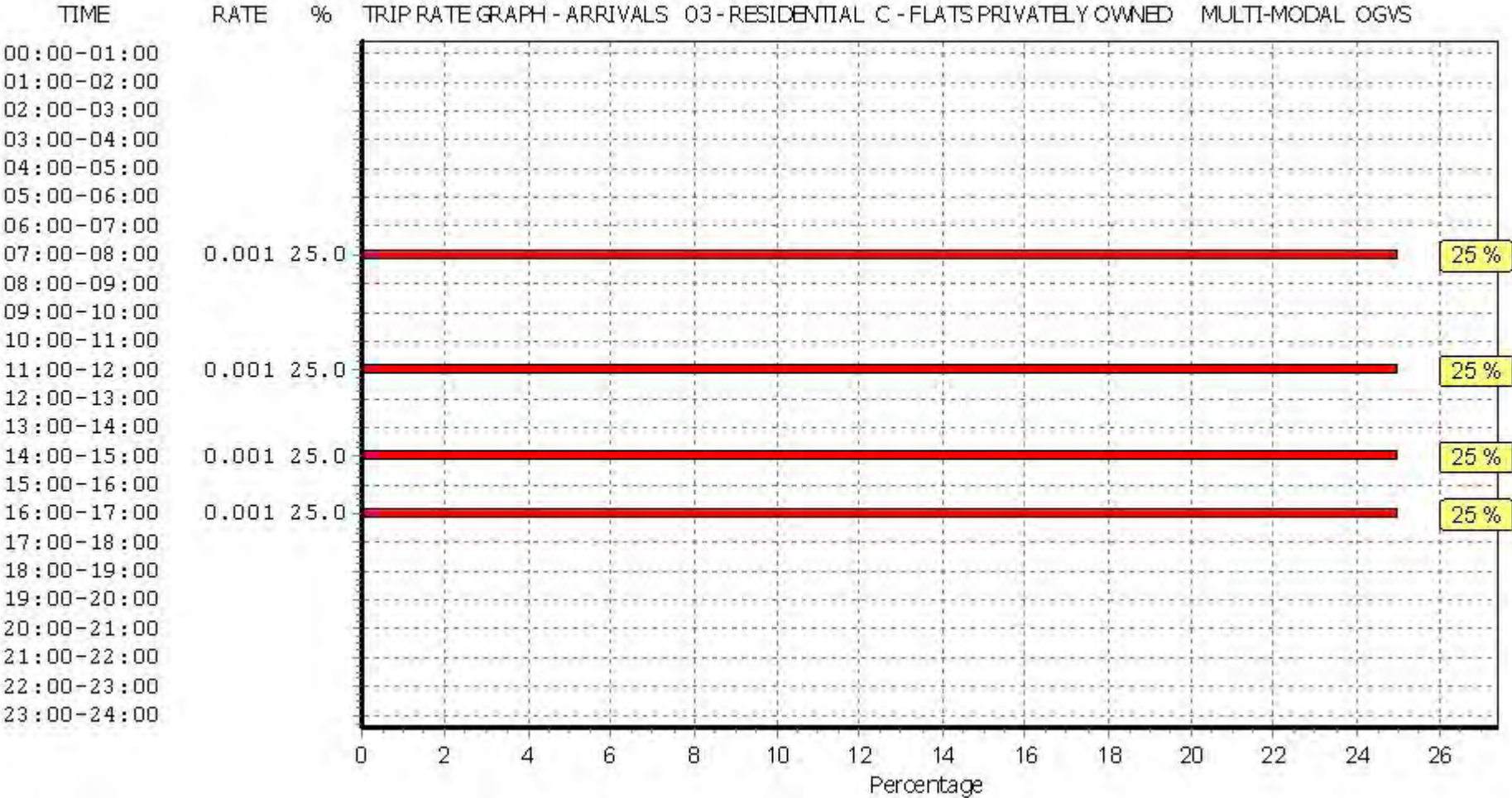
Trip rate parameter range selected: 9 - 294 (units: )  
 Survey date range: 01/01/05 - 11/05/12  
 Number of weekdays (Monday-Friday): 12  
 Number of Saturdays: 0  
 Number of Sundays: 0  
 Surveys manually removed from selection: 0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

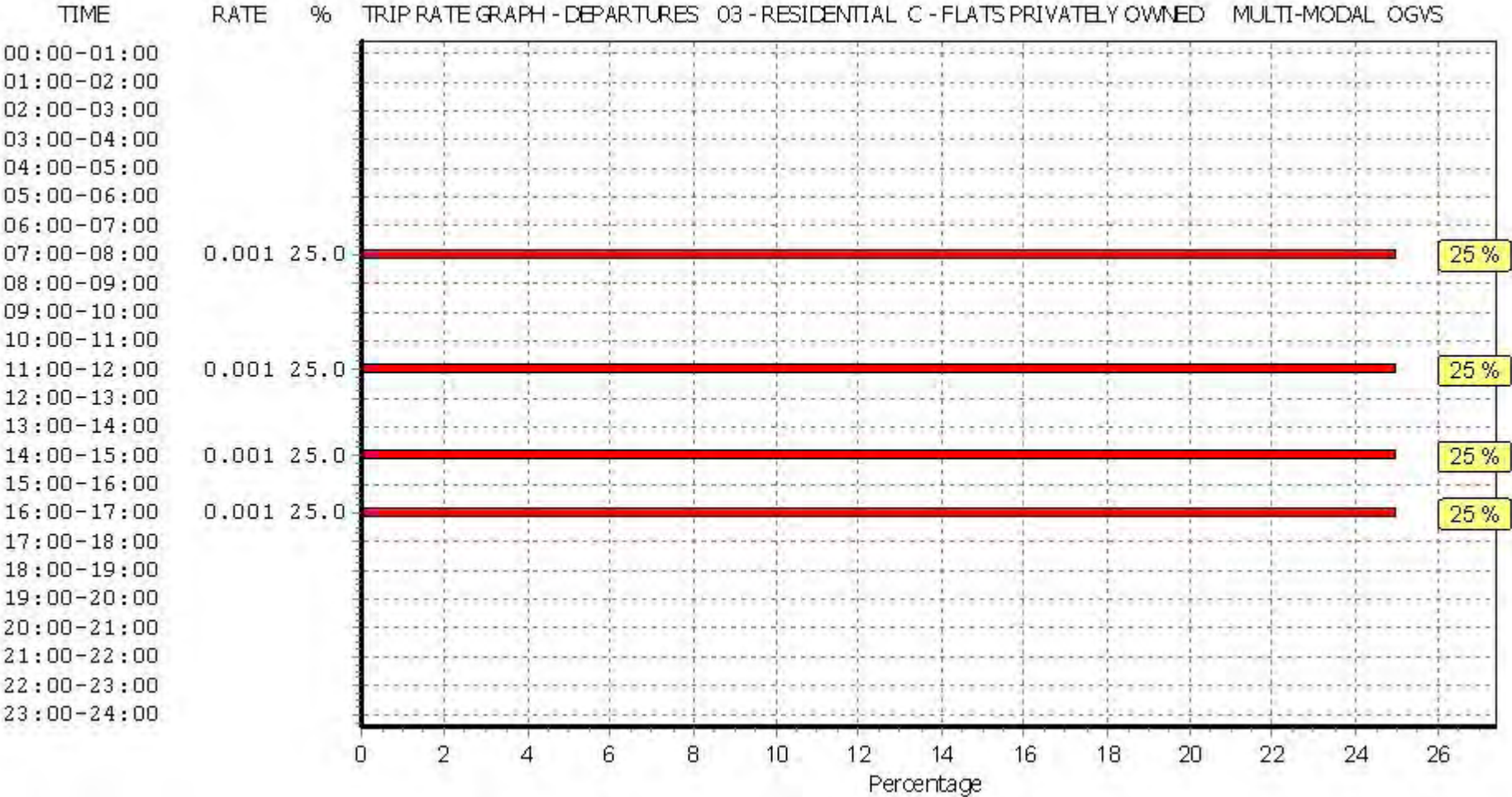


OFF-LINE VERSION

Licence No: 142301



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

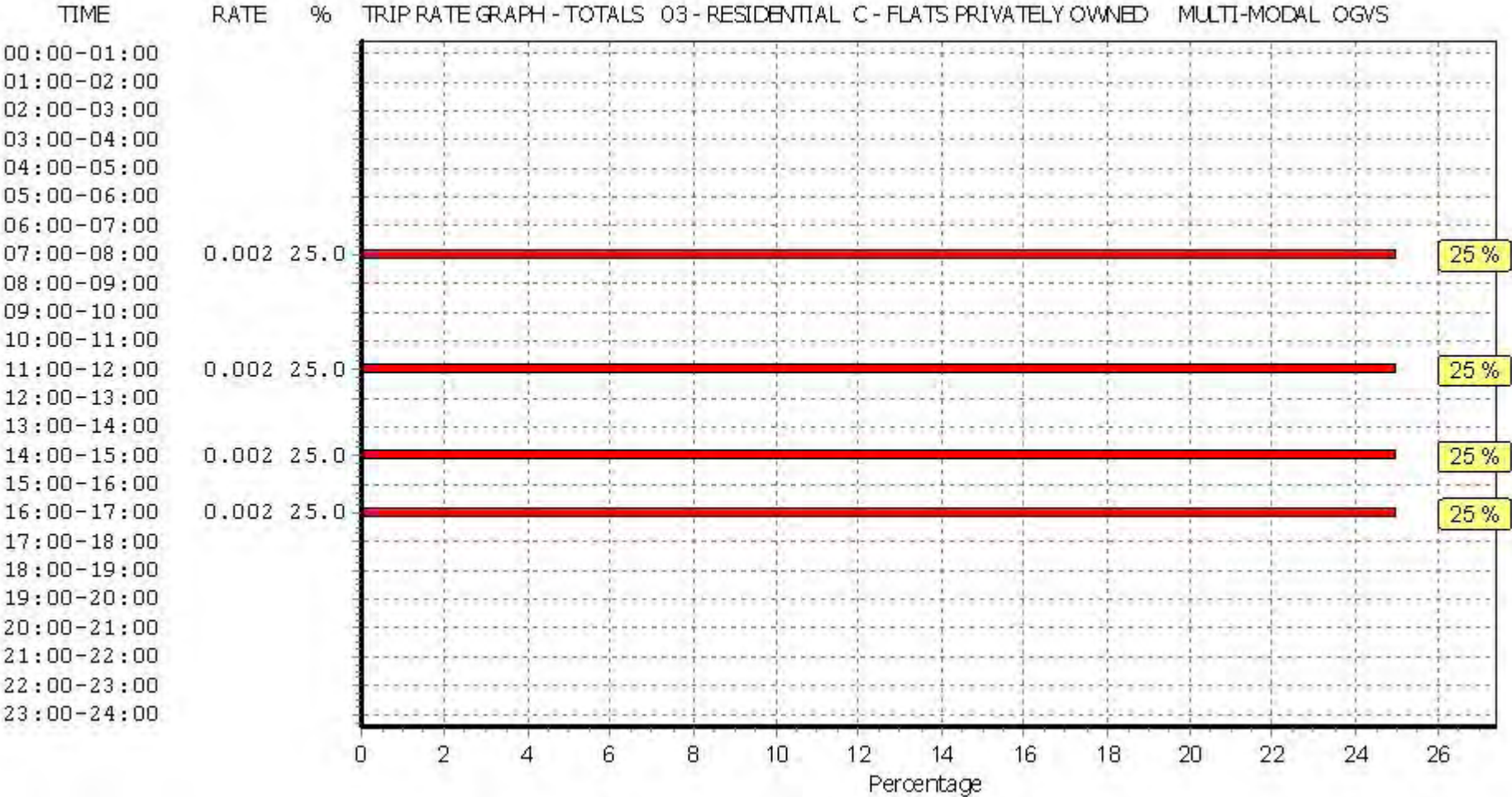


This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



OFF-LINE VERSION

Licence No: 142301



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED  
MULTI-MODAL PSVS  
Calculation factor: 1 DWELLS  
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	12	62	0.000	12	62	0.000	12	62	0.000
08:00 - 09:00	12	62	0.000	12	62	0.000	12	62	0.000
09:00 - 10:00	12	62	0.000	12	62	0.000	12	62	0.000
10:00 - 11:00	12	62	0.000	12	62	0.000	12	62	0.000
11:00 - 12:00	12	62	0.000	12	62	0.000	12	62	0.000
12:00 - 13:00	12	62	0.000	12	62	0.000	12	62	0.000
13:00 - 14:00	12	62	0.000	12	62	0.000	12	62	0.000
14:00 - 15:00	12	62	0.000	12	62	0.000	12	62	0.000
15:00 - 16:00	12	62	0.000	12	62	0.000	12	62	0.000
16:00 - 17:00	12	62	0.000	12	62	0.000	12	62	0.000
17:00 - 18:00	12	62	0.000	12	62	0.000	12	62	0.000
18:00 - 19:00	12	62	0.000	12	62	0.000	12	62	0.000
19:00 - 20:00	1	294	0.000	1	294	0.000	1	294	0.000
20:00 - 21:00	1	294	0.000	1	294	0.000	1	294	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:		0.000			0.000			0.000	

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

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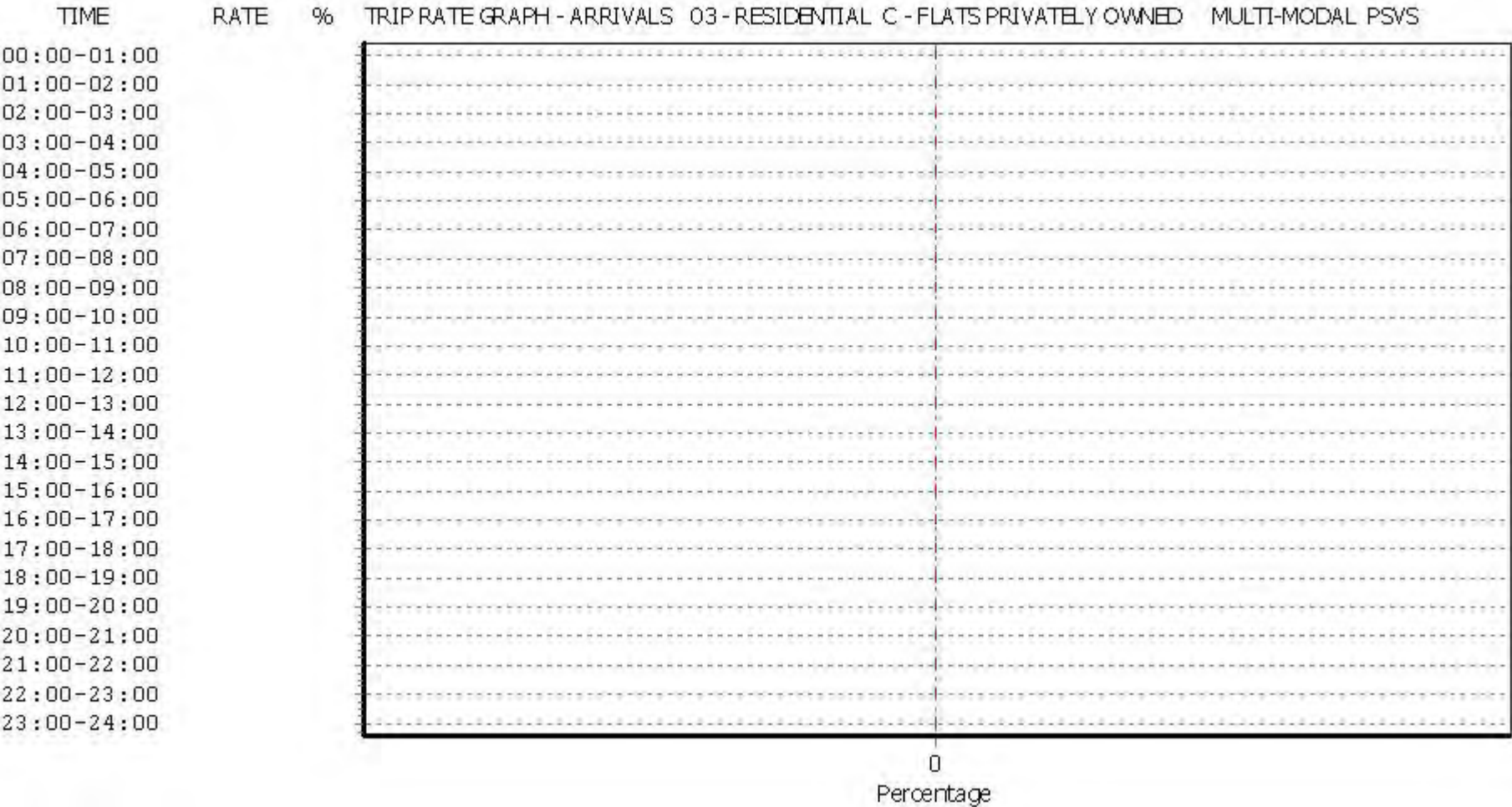
#### Parameter summary

Trip rate parameter range selected: 9 - 294 (units: )  
Survey date range: 01/01/05 - 11/05/12  
Number of weekdays (Monday-Friday): 12  
Number of Saturdays: 0  
Number of Sundays: 0  
Surveys manually removed from selection: 0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

OFF-LINE VERSION

Licence No: 142301

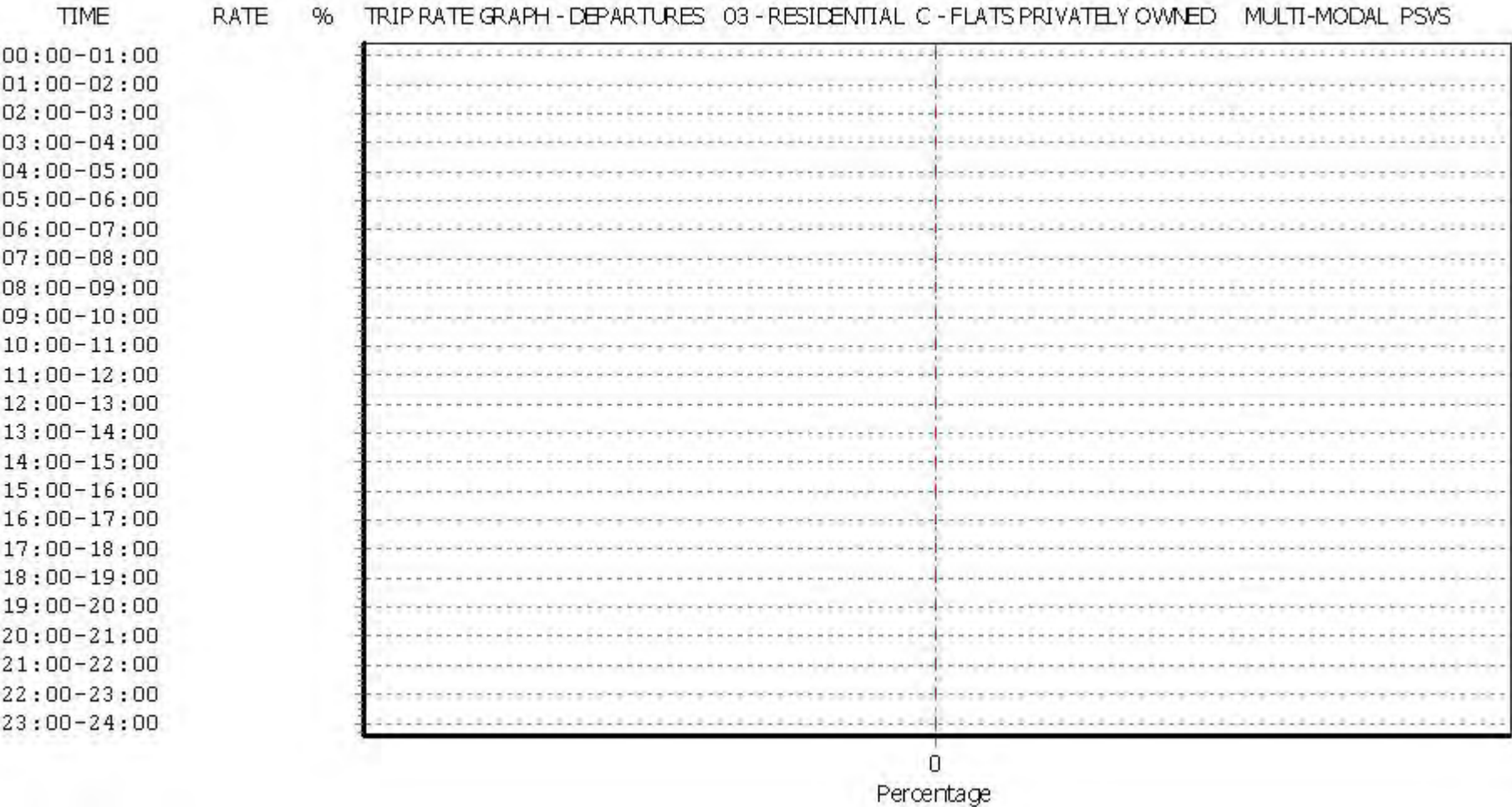


This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



OFF-LINE VERSION

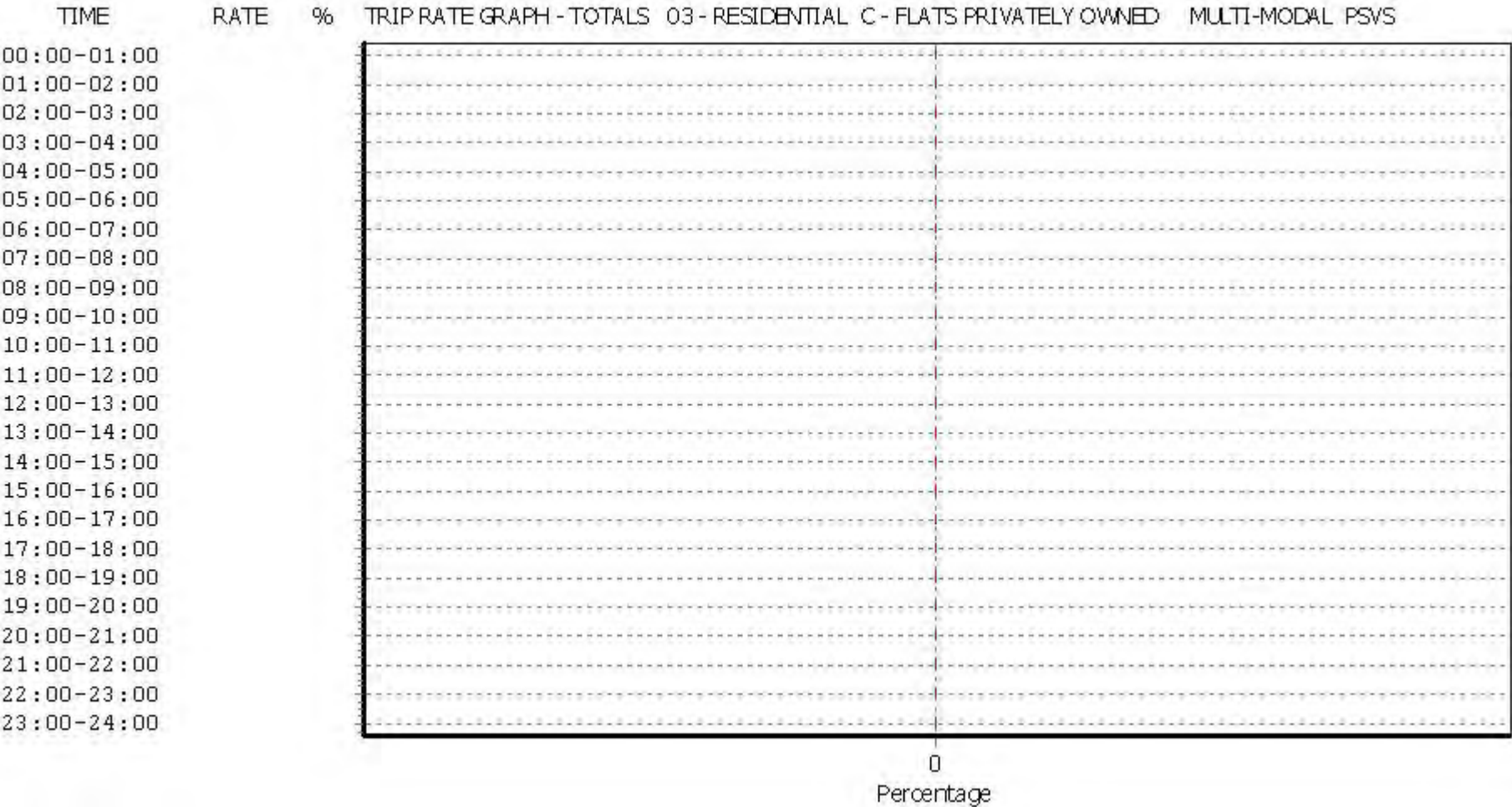
Licence No: 142301



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

OFF-LINE VERSION

Licence No: 142301



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

OFF-LINE VERSION

Licence No: 142301

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL CYCLISTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	12	62	0.004	12	62	0.007	12	62	0.011
08:00 - 09:00	12	62	0.008	12	62	0.018	12	62	0.026
09:00 - 10:00	12	62	0.000	12	62	0.007	12	62	0.007
10:00 - 11:00	12	62	0.004	12	62	0.004	12	62	0.008
11:00 - 12:00	12	62	0.001	12	62	0.005	12	62	0.006
12:00 - 13:00	12	62	0.004	12	62	0.003	12	62	0.007
13:00 - 14:00	12	62	0.000	12	62	0.000	12	62	0.000
14:00 - 15:00	12	62	0.003	12	62	0.000	12	62	0.003
15:00 - 16:00	12	62	0.000	12	62	0.001	12	62	0.001
16:00 - 17:00	12	62	0.004	12	62	0.001	12	62	0.005
17:00 - 18:00	12	62	0.005	12	62	0.001	12	62	0.006
18:00 - 19:00	12	62	0.016	12	62	0.007	12	62	0.023
19:00 - 20:00	1	294	0.017	1	294	0.014	1	294	0.031
20:00 - 21:00	1	294	0.007	1	294	0.000	1	294	0.007
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.073			0.068			0.141

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

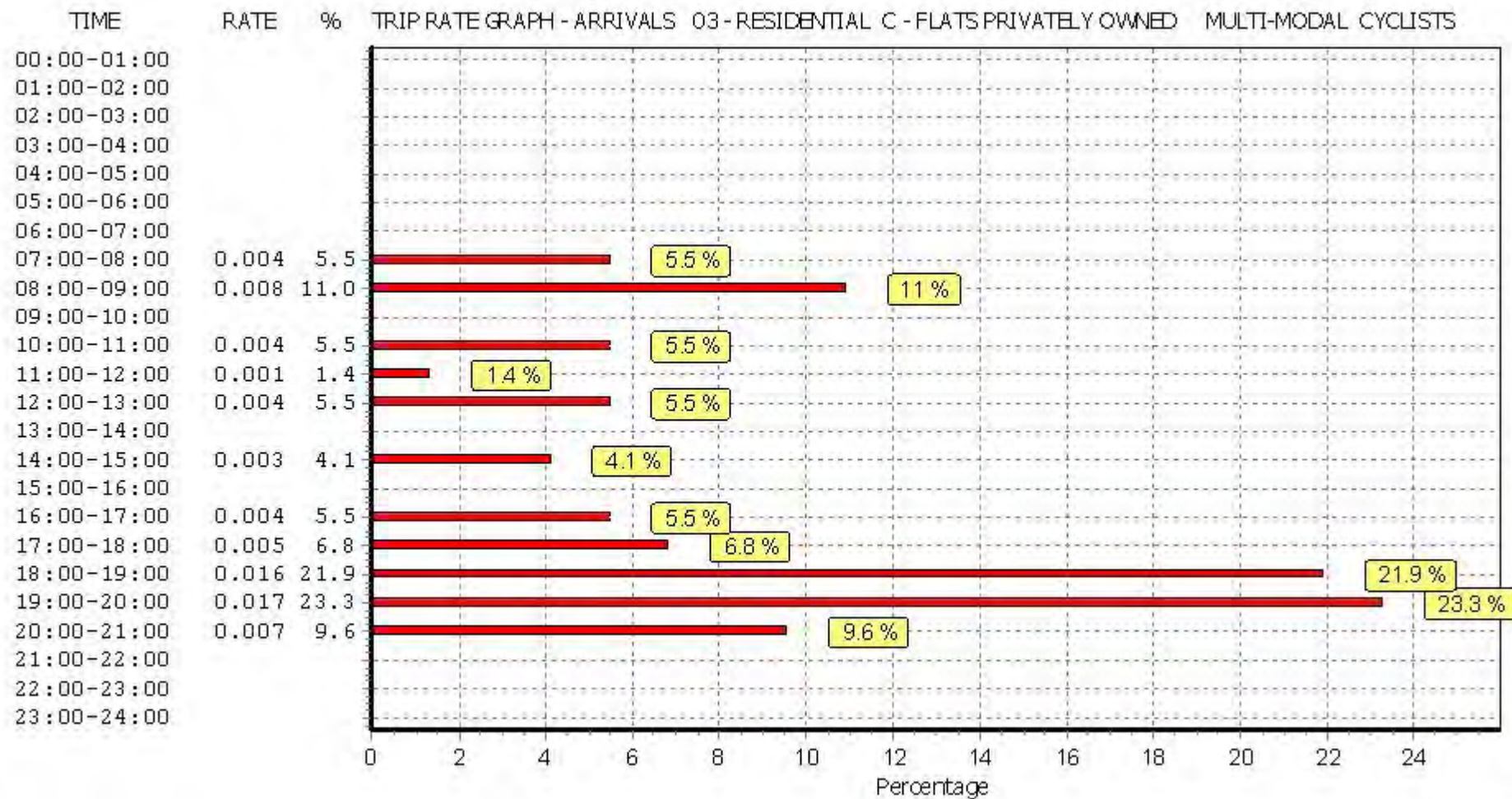
#### Parameter summary

Trip rate parameter range selected: 9 - 294 (units: )  
 Survey date range: 01/01/05 - 11/05/12  
 Number of weekdays (Monday-Friday): 12  
 Number of Saturdays: 0  
 Number of Sundays: 0  
 Surveys manually removed from selection: 0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

OFF-LINE VERSION

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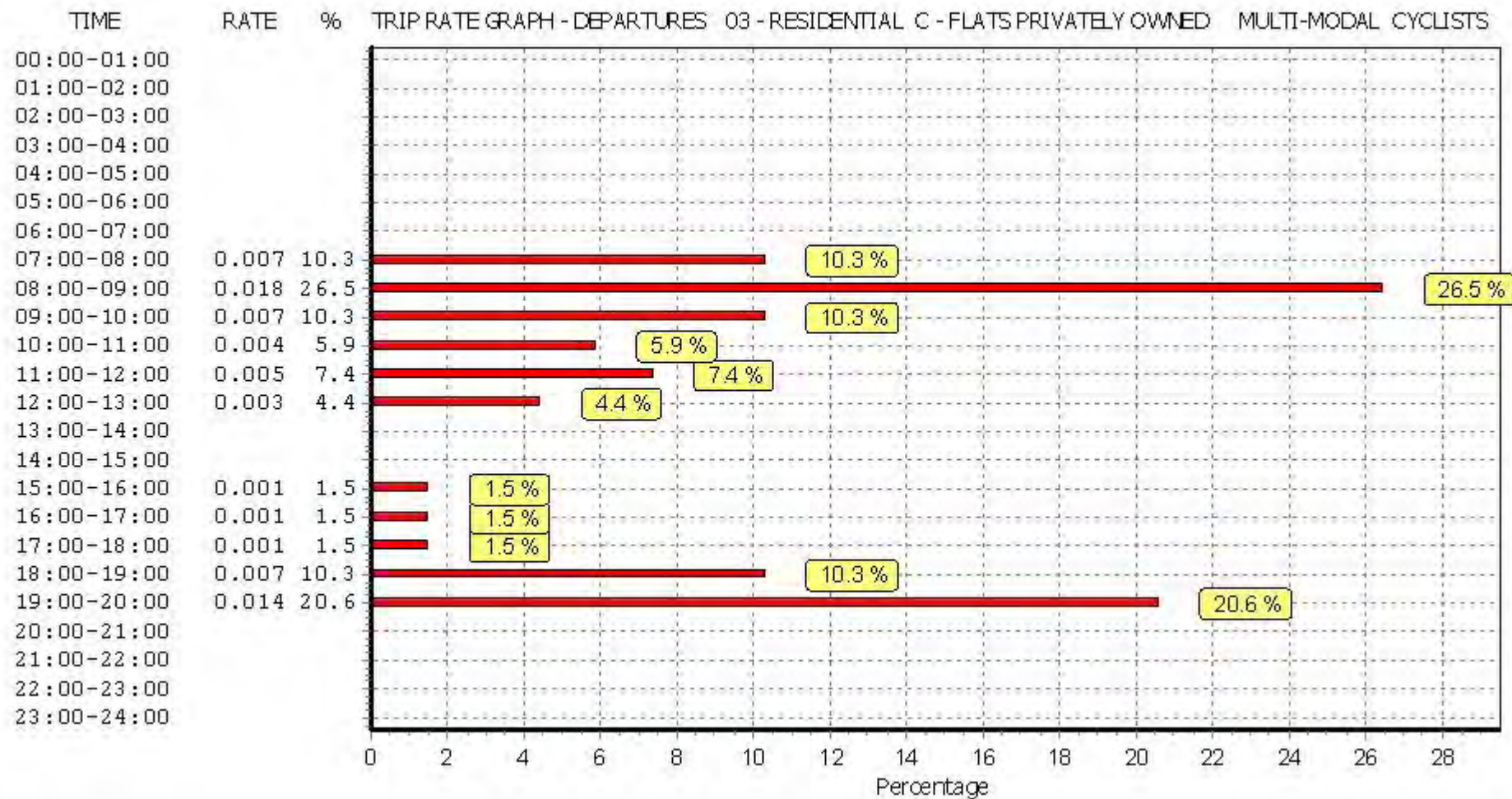


This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



OFF-LINE VERSION

Licence No: 142301

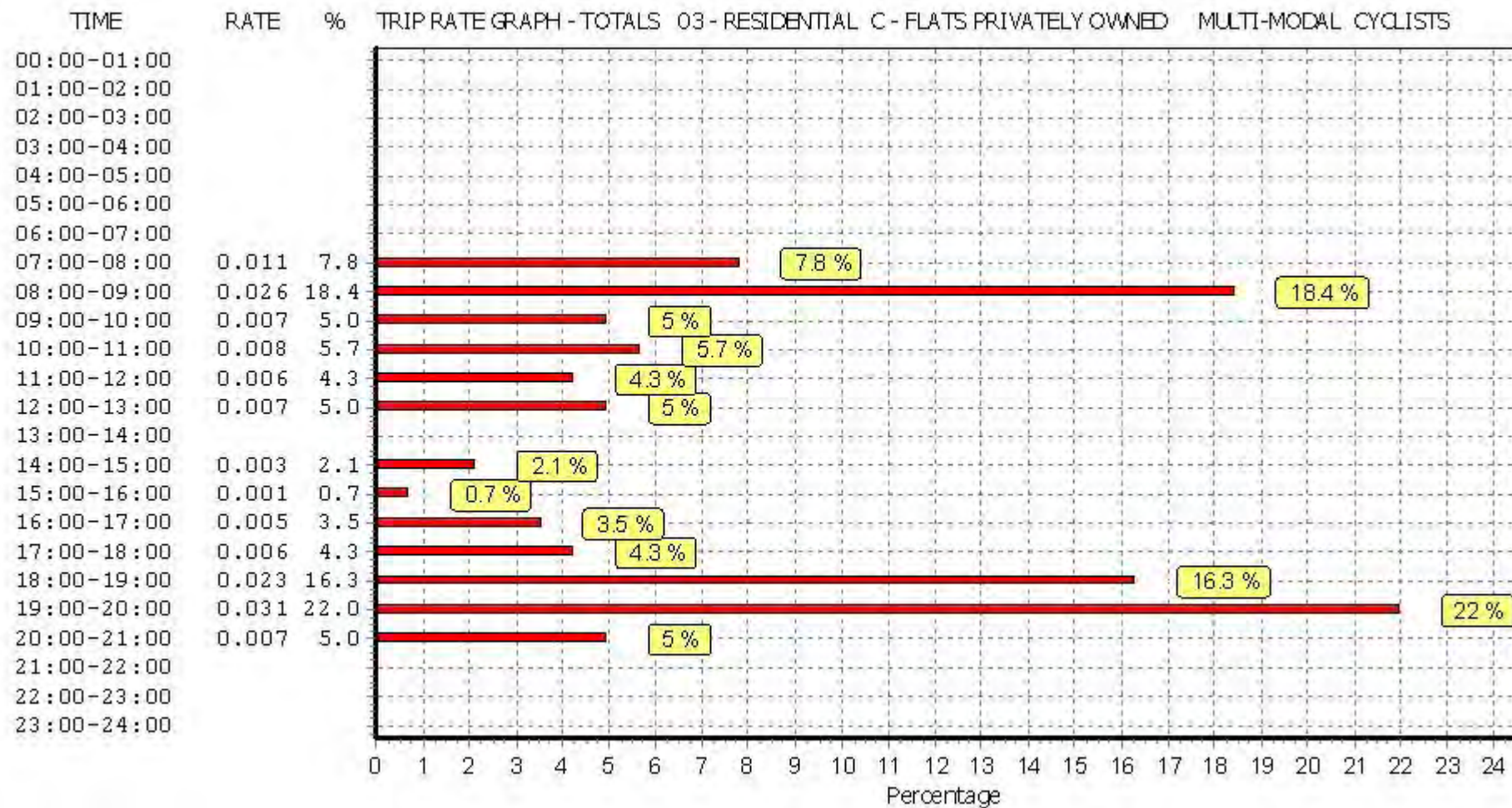


This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



OFF-LINE VERSION

Licence No: 142301



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

OFF-LINE VERSION

Licence No: 142301

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL VEHICLE OCCUPANTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	12	62	0.022	12	62	0.093	12	62	0.115
08:00 - 09:00	12	62	0.066	12	62	0.252	12	62	0.318
09:00 - 10:00	12	62	0.075	12	62	0.082	12	62	0.157
10:00 - 11:00	12	62	0.036	12	62	0.051	12	62	0.087
11:00 - 12:00	12	62	0.063	12	62	0.051	12	62	0.114
12:00 - 13:00	12	62	0.055	12	62	0.070	12	62	0.125
13:00 - 14:00	12	62	0.050	12	62	0.055	12	62	0.105
14:00 - 15:00	12	62	0.046	12	62	0.055	12	62	0.101
15:00 - 16:00	12	62	0.131	12	62	0.057	12	62	0.188
16:00 - 17:00	12	62	0.071	12	62	0.042	12	62	0.113
17:00 - 18:00	12	62	0.120	12	62	0.062	12	62	0.182
18:00 - 19:00	12	62	0.096	12	62	0.065	12	62	0.161
19:00 - 20:00	1	294	0.092	1	294	0.068	1	294	0.160
20:00 - 21:00	1	294	0.065	1	294	0.044	1	294	0.109
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.988			1.047			2.035

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

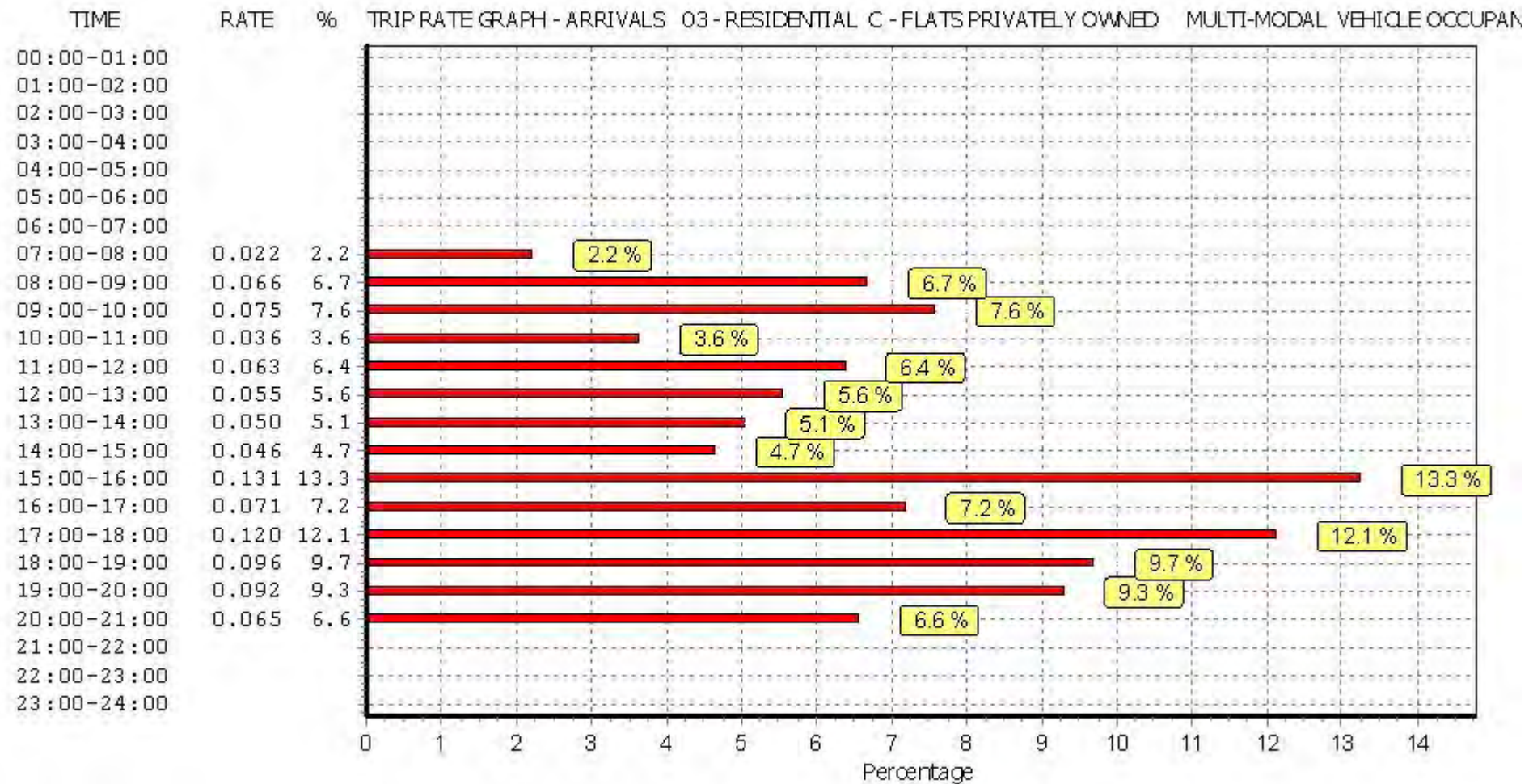
#### Parameter summary

Trip rate parameter range selected: 9 - 294 (units: )  
 Survey date range: 01/01/05 - 11/05/12  
 Number of weekdays (Monday-Friday): 12  
 Number of Saturdays: 0  
 Number of Sundays: 0  
 Surveys manually removed from selection: 0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

OFF-LINE VERSION

Licence No: 142301

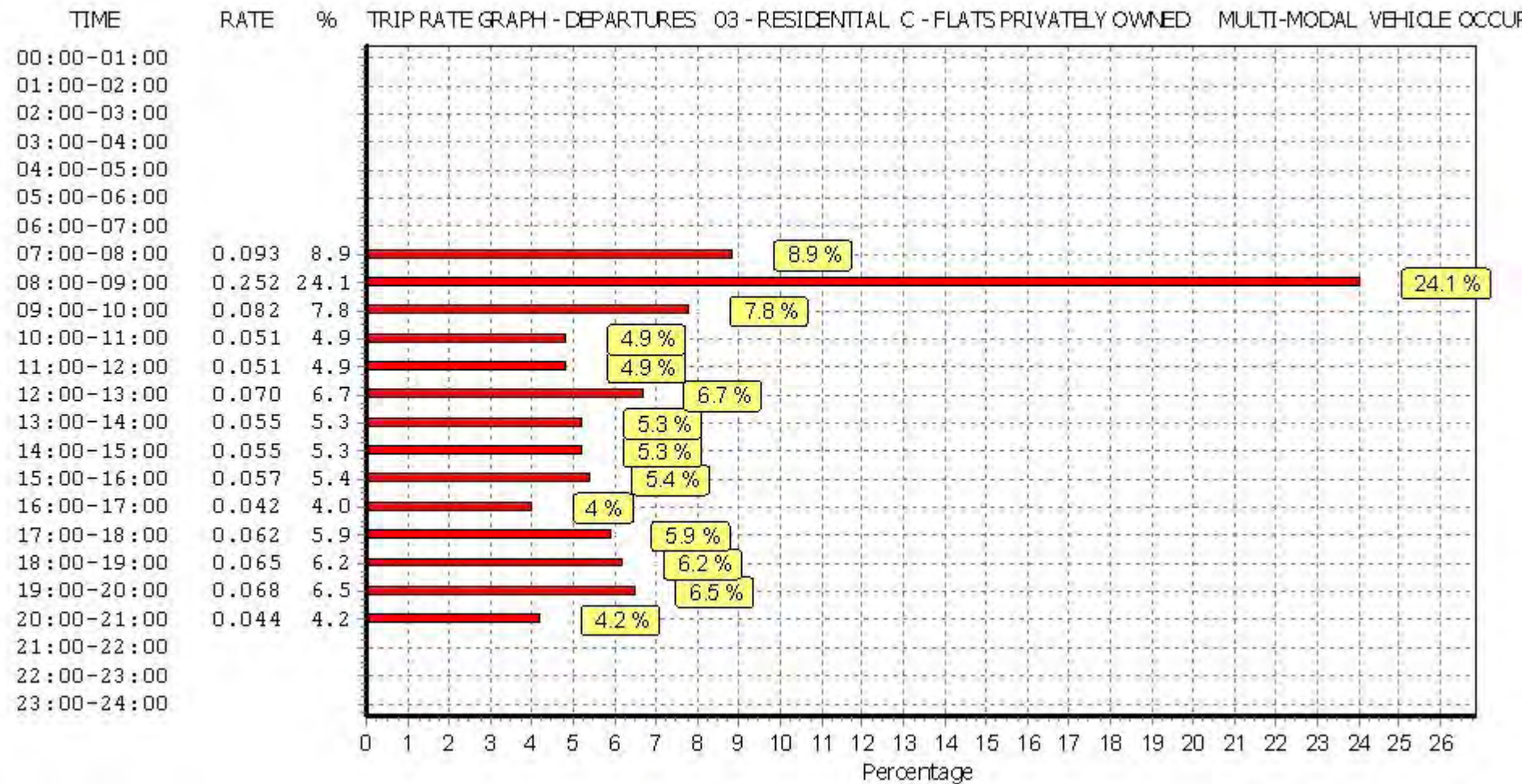


This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



OFF-LINE VERSION

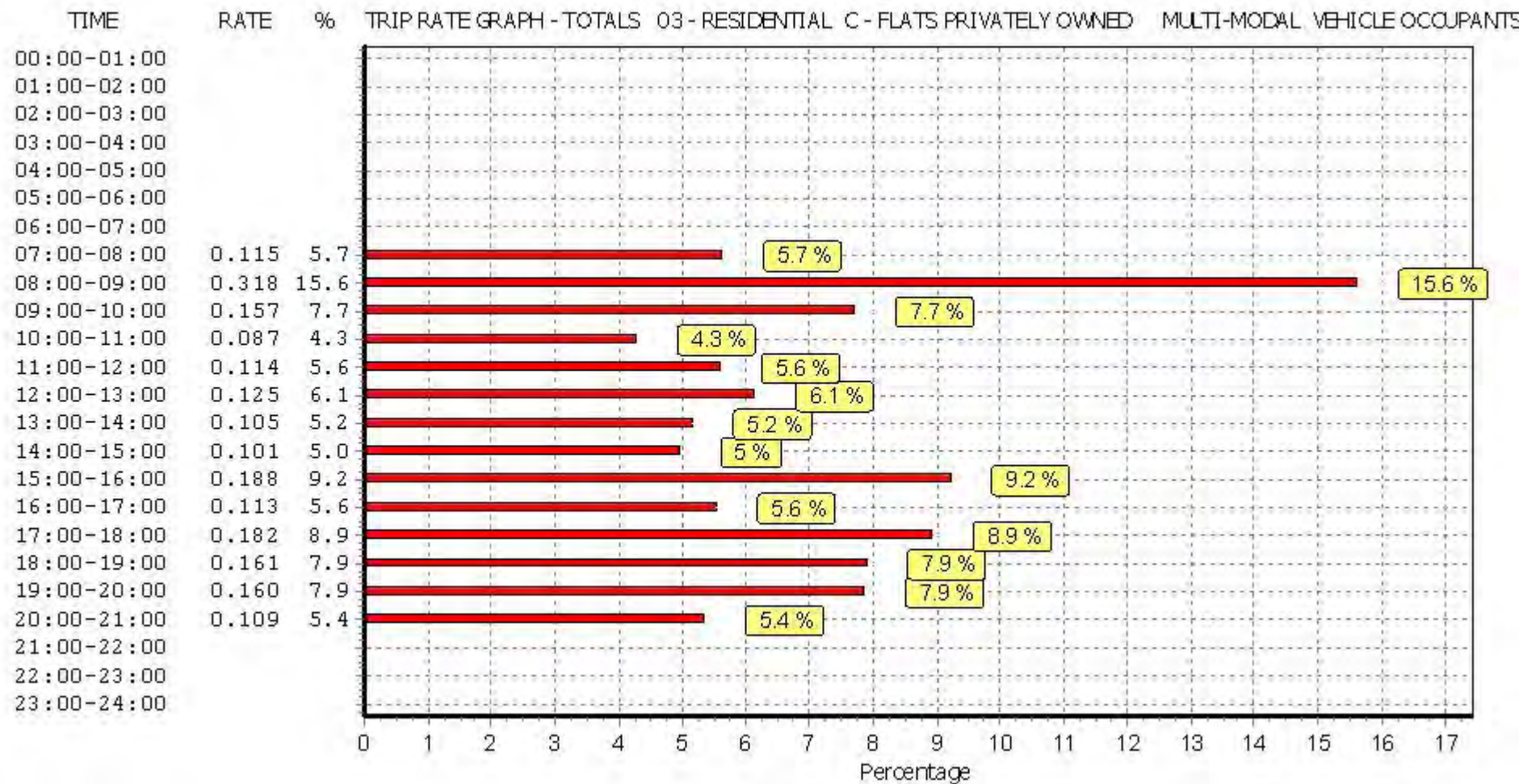
Licence No: 142301



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

OFF-LINE VERSION

Licence No: 142301



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



OFF-LINE VERSION

Licence No: 142301

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL PEDESTRIANS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	12	62	0.013	12	62	0.055	12	62	0.068
08:00 - 09:00	12	62	0.028	12	62	0.156	12	62	0.184
09:00 - 10:00	12	62	0.035	12	62	0.063	12	62	0.098
10:00 - 11:00	12	62	0.034	12	62	0.075	12	62	0.109
11:00 - 12:00	12	62	0.058	12	62	0.050	12	62	0.108
12:00 - 13:00	12	62	0.084	12	62	0.057	12	62	0.141
13:00 - 14:00	12	62	0.074	12	62	0.080	12	62	0.154
14:00 - 15:00	12	62	0.070	12	62	0.077	12	62	0.147
15:00 - 16:00	12	62	0.113	12	62	0.054	12	62	0.167
16:00 - 17:00	12	62	0.094	12	62	0.061	12	62	0.155
17:00 - 18:00	12	62	0.135	12	62	0.089	12	62	0.224
18:00 - 19:00	12	62	0.124	12	62	0.063	12	62	0.187
19:00 - 20:00	1	294	0.085	1	294	0.020	1	294	0.105
20:00 - 21:00	1	294	0.078	1	294	0.058	1	294	0.136
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.025			0.958			1.983

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

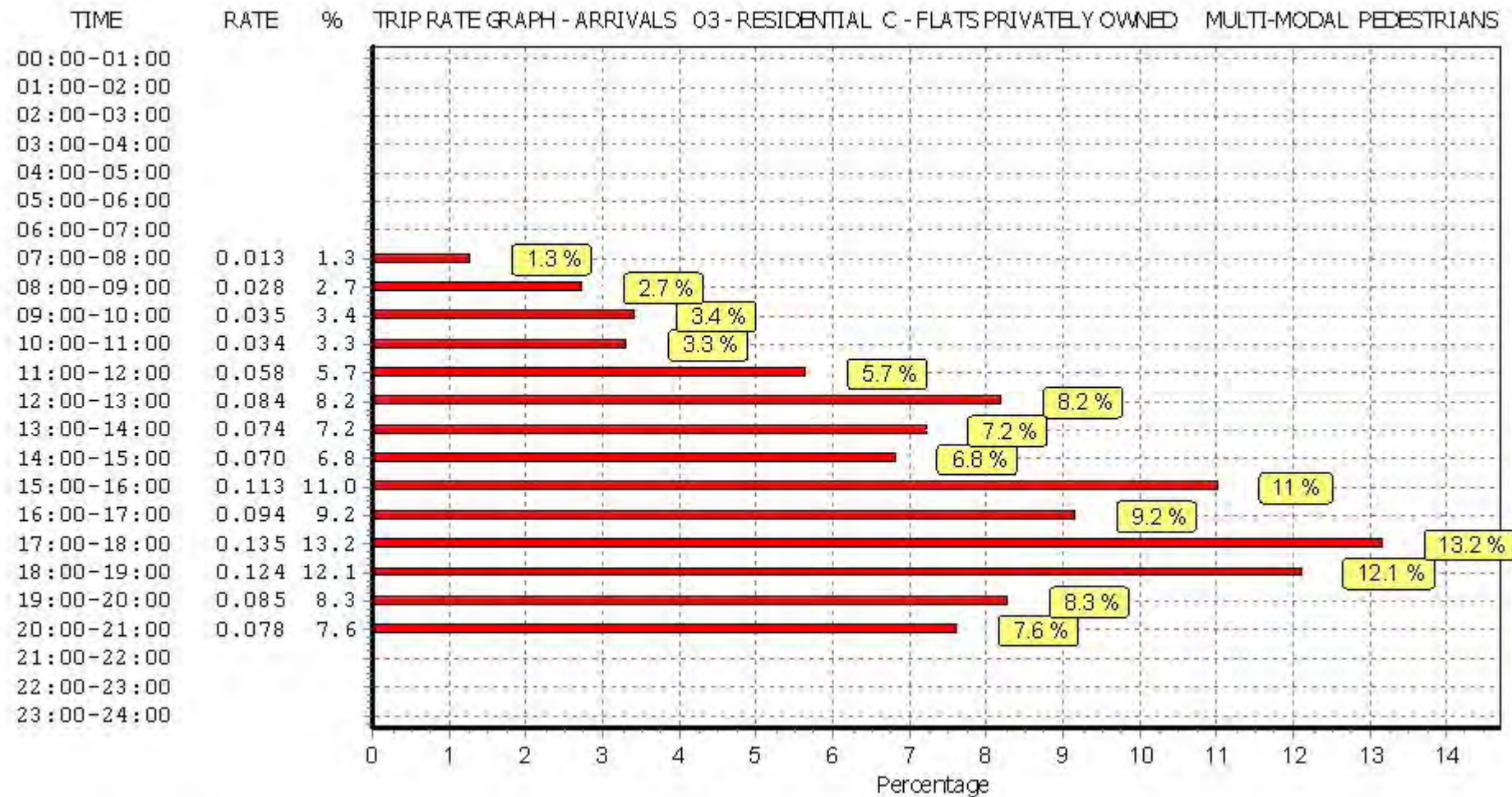
#### Parameter summary

Trip rate parameter range selected: 9 - 294 (units: )  
 Survey date range: 01/01/05 - 11/05/12  
 Number of weekdays (Monday-Friday): 12  
 Number of Saturdays: 0  
 Number of Sundays: 0  
 Surveys manually removed from selection: 0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

OFF-LINE VERSION

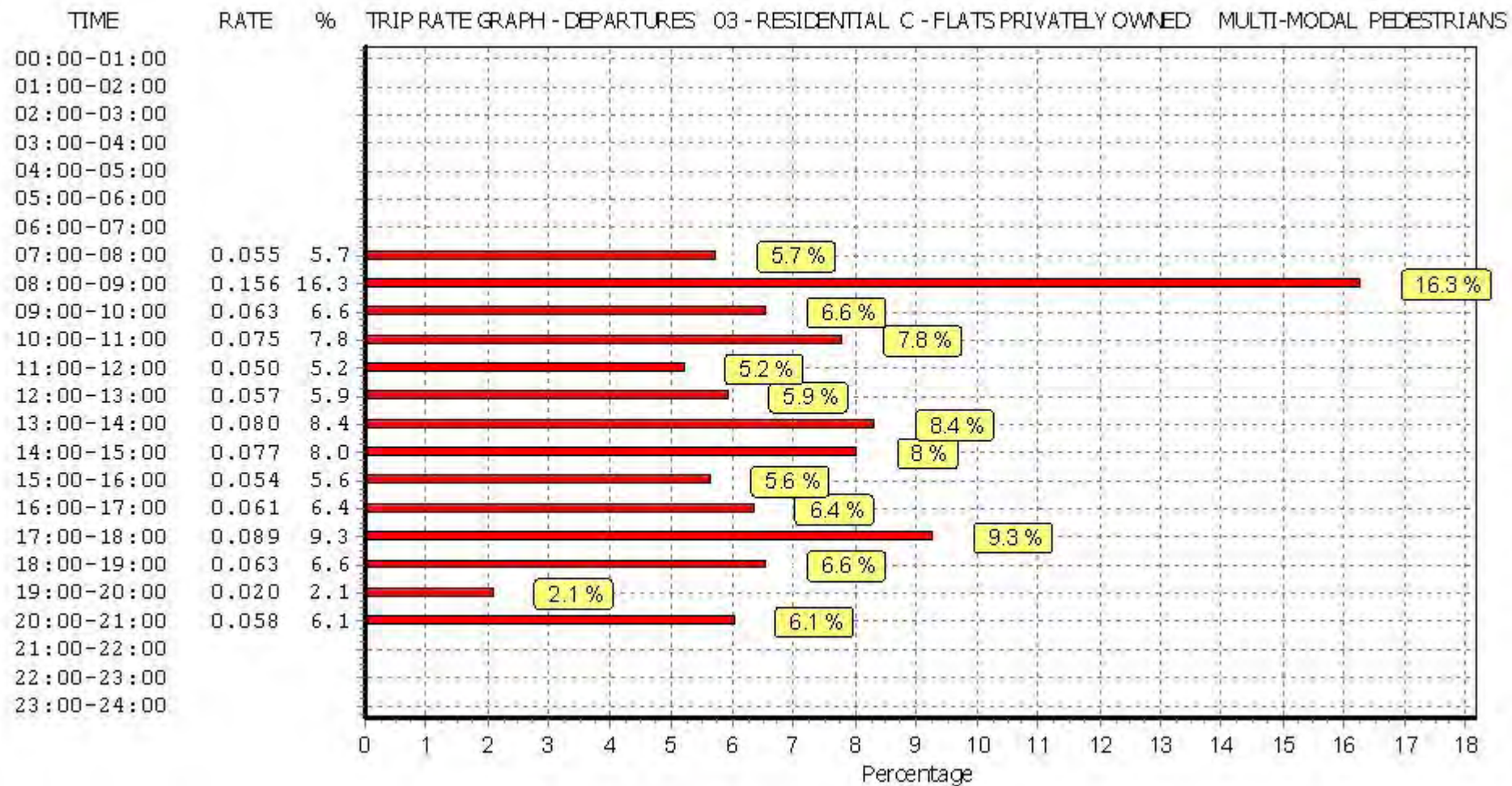
Licence No: 142301



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

OFF-LINE VERSION

Licence No: 142301

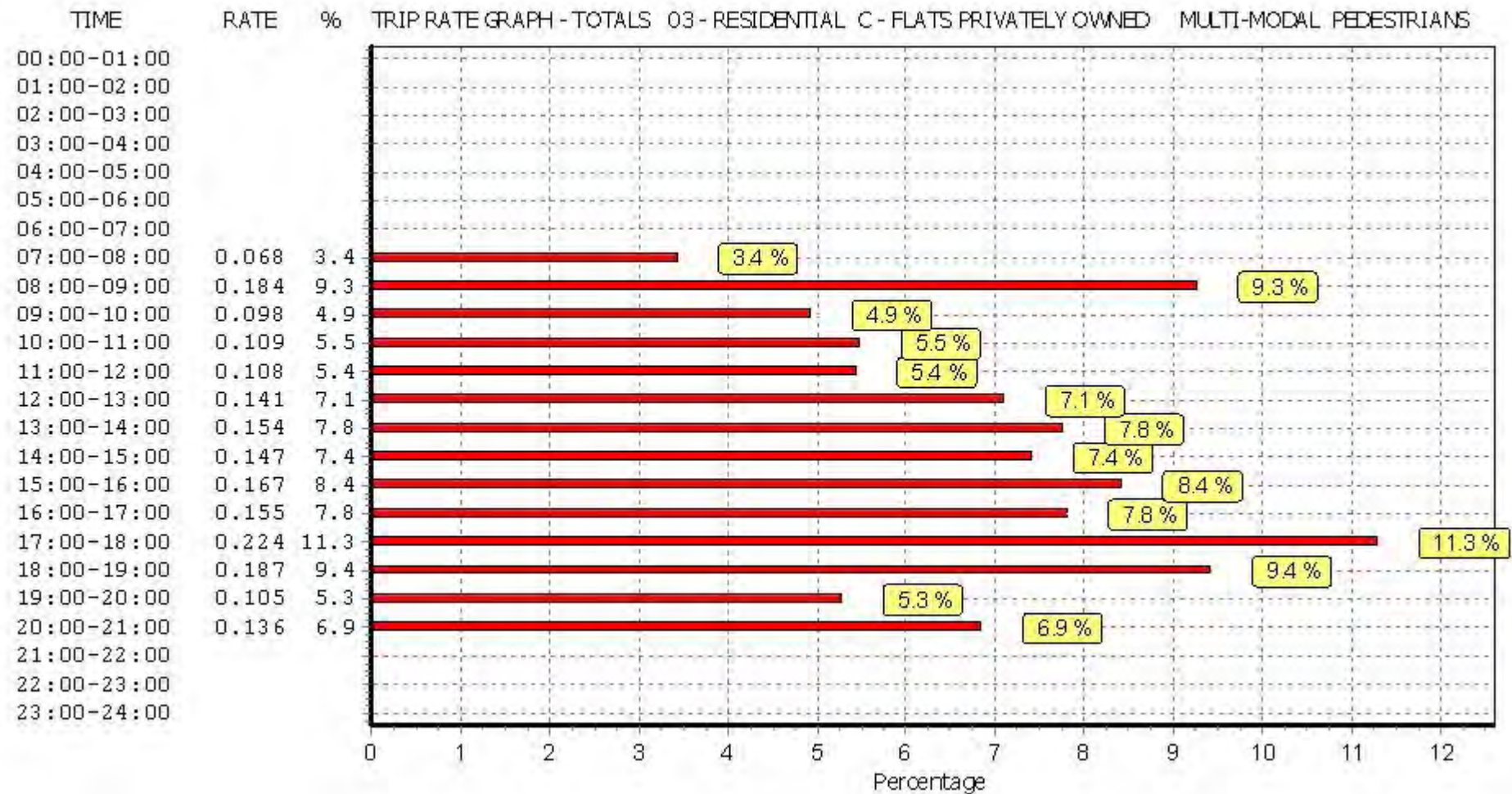


This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



OFF-LINE VERSION

Licence No: 142301



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED  
MULTI-MODAL BUS/TRAM PASSENGERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	12	62	0.008	12	62	0.054	12	62	0.062
08:00 - 09:00	12	62	0.016	12	62	0.089	12	62	0.105
09:00 - 10:00	12	62	0.008	12	62	0.032	12	62	0.040
10:00 - 11:00	12	62	0.003	12	62	0.027	12	62	0.030
11:00 - 12:00	12	62	0.009	12	62	0.018	12	62	0.027
12:00 - 13:00	12	62	0.008	12	62	0.024	12	62	0.032
13:00 - 14:00	12	62	0.019	12	62	0.015	12	62	0.034
14:00 - 15:00	12	62	0.009	12	62	0.030	12	62	0.039
15:00 - 16:00	12	62	0.039	12	62	0.011	12	62	0.050
16:00 - 17:00	12	62	0.047	12	62	0.028	12	62	0.075
17:00 - 18:00	12	62	0.051	12	62	0.009	12	62	0.060
18:00 - 19:00	12	62	0.046	12	62	0.008	12	62	0.054
19:00 - 20:00	1	294	0.037	1	294	0.007	1	294	0.044
20:00 - 21:00	1	294	0.020	1	294	0.000	1	294	0.020
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.320			0.352			0.672

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

#### Parameter summary

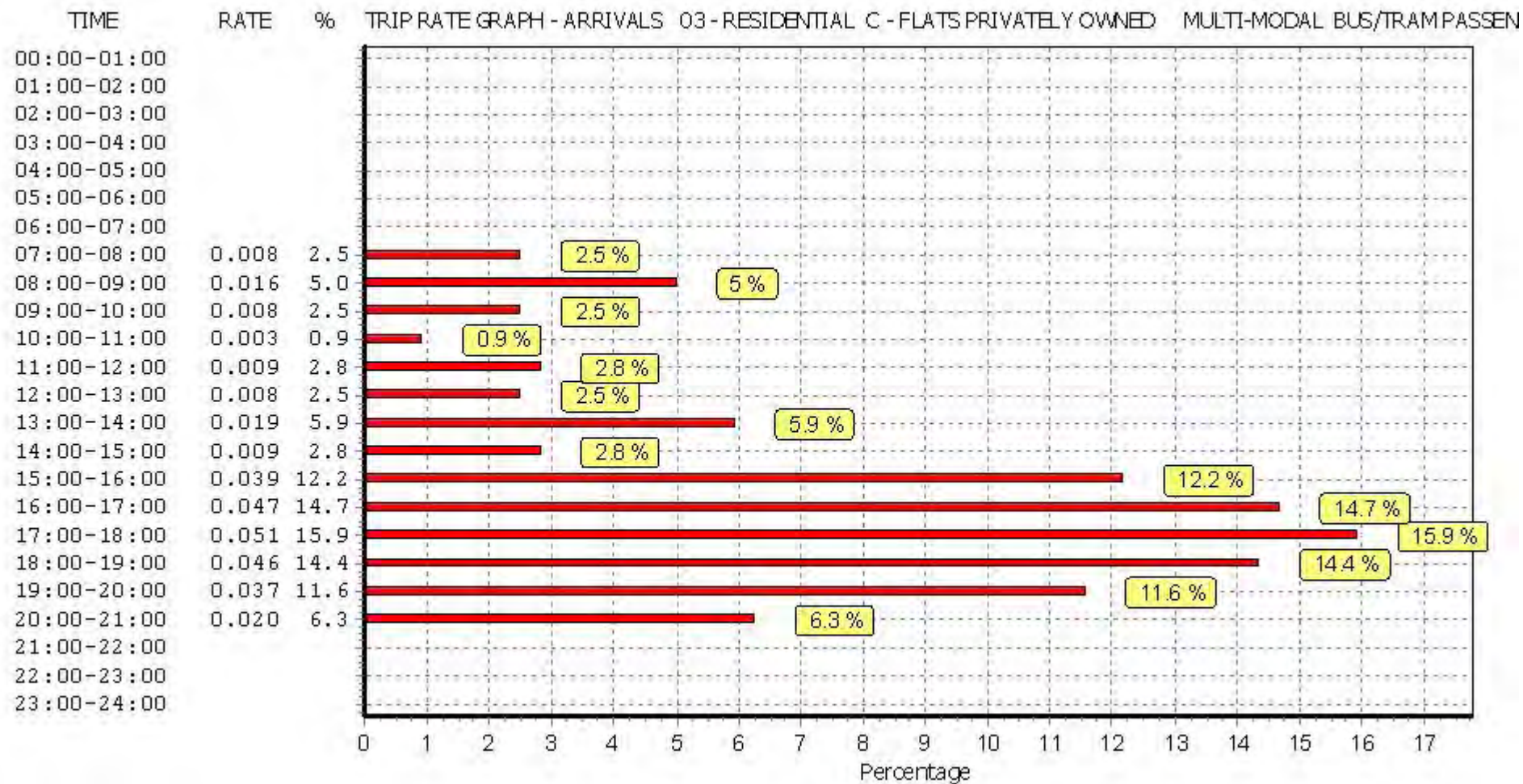
Trip rate parameter range selected: 9 - 294 (units: )  
 Survey date range: 01/01/05 - 11/05/12  
 Number of weekdays (Monday-Friday): 12  
 Number of Saturdays: 0  
 Number of Sundays: 0  
 Surveys manually removed from selection: 0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.



OFF-LINE VERSION

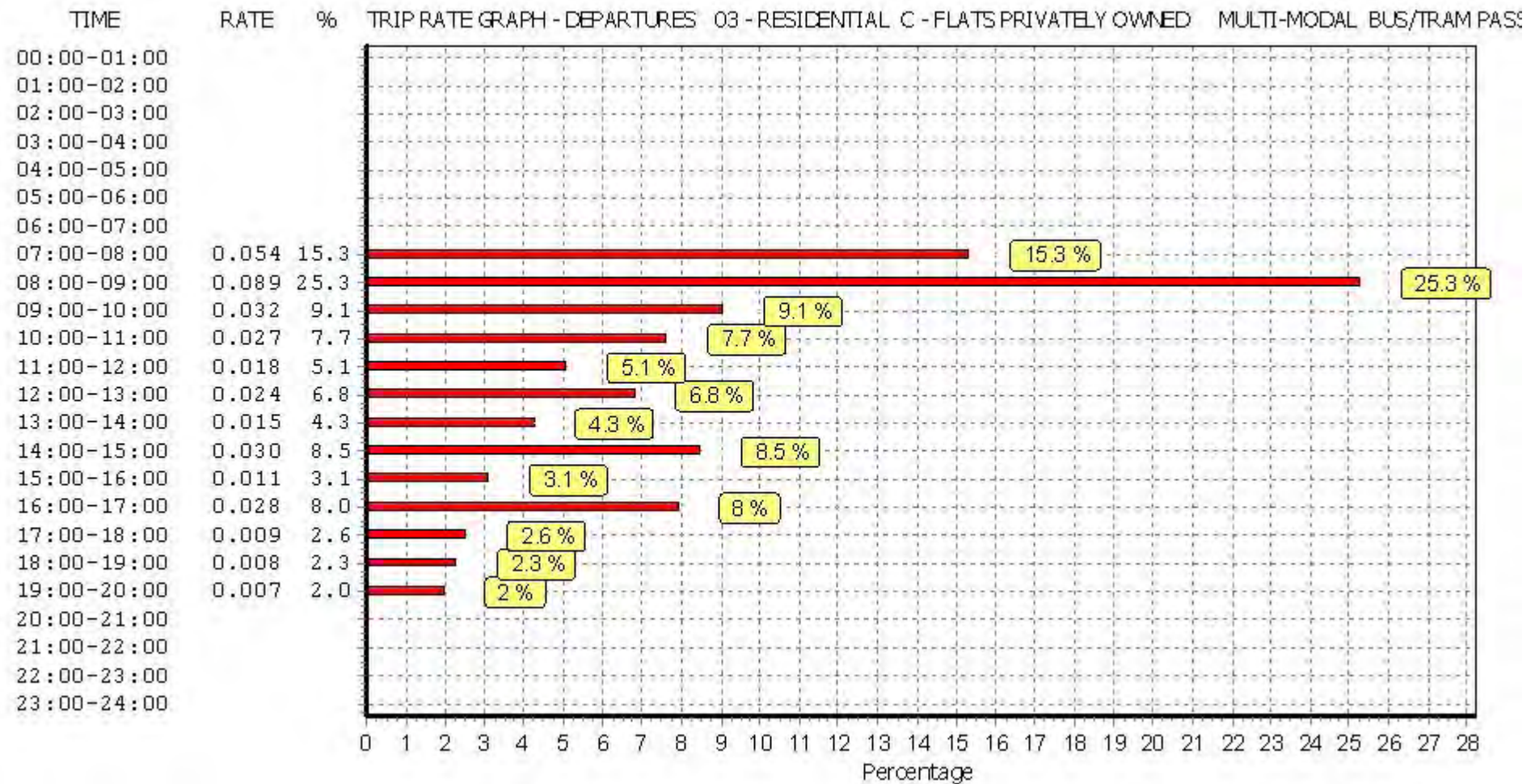
Licence No: 142301



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

OFF-LINE VERSION

Licence No: 142301



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



OFF-LINE VERSION

Licence No: 142301



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

OFF-LINE VERSION

Licence No: 142301

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL TRAIN PASSENGERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	12	62	0.001	12	62	0.096	12	62	0.097
08:00 - 09:00	12	62	0.011	12	62	0.094	12	62	0.105
09:00 - 10:00	12	62	0.016	12	62	0.049	12	62	0.065
10:00 - 11:00	12	62	0.005	12	62	0.018	12	62	0.023
11:00 - 12:00	12	62	0.007	12	62	0.024	12	62	0.031
12:00 - 13:00	12	62	0.007	12	62	0.011	12	62	0.018
13:00 - 14:00	12	62	0.005	12	62	0.015	12	62	0.020
14:00 - 15:00	12	62	0.026	12	62	0.008	12	62	0.034
15:00 - 16:00	12	62	0.009	12	62	0.008	12	62	0.017
16:00 - 17:00	12	62	0.024	12	62	0.013	12	62	0.037
17:00 - 18:00	12	62	0.051	12	62	0.011	12	62	0.062
18:00 - 19:00	12	62	0.071	12	62	0.015	12	62	0.086
19:00 - 20:00	1	294	0.054	1	294	0.003	1	294	0.057
20:00 - 21:00	1	294	0.017	1	294	0.000	1	294	0.017
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.304			0.365			0.669

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

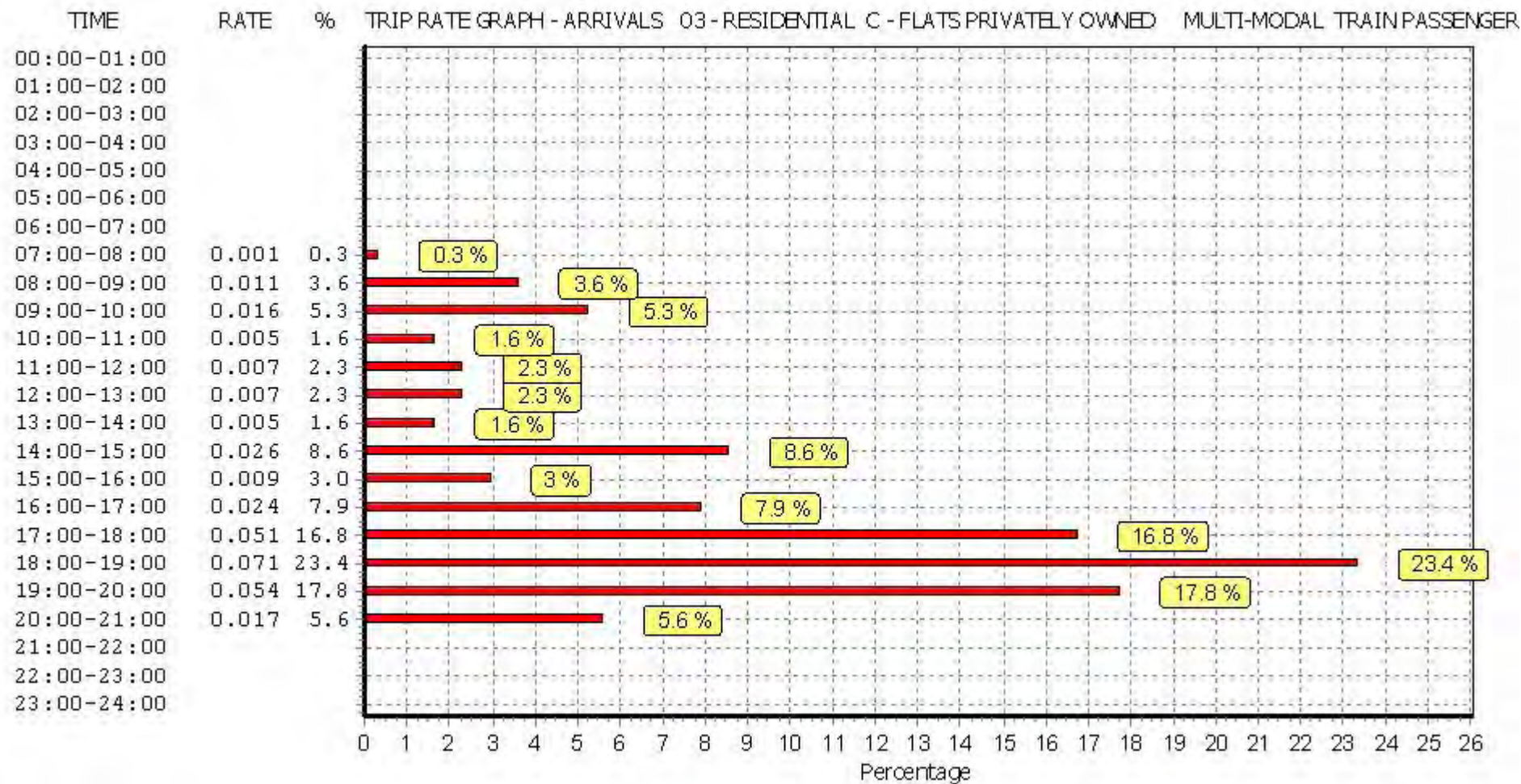
#### Parameter summary

Trip rate parameter range selected: 9 - 294 (units: )  
 Survey date range: 01/01/05 - 11/05/12  
 Number of weekdays (Monday-Friday): 12  
 Number of Saturdays: 0  
 Number of Sundays: 0  
 Surveys manually removed from selection: 0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

OFF-LINE VERSION

Licence No: 142301

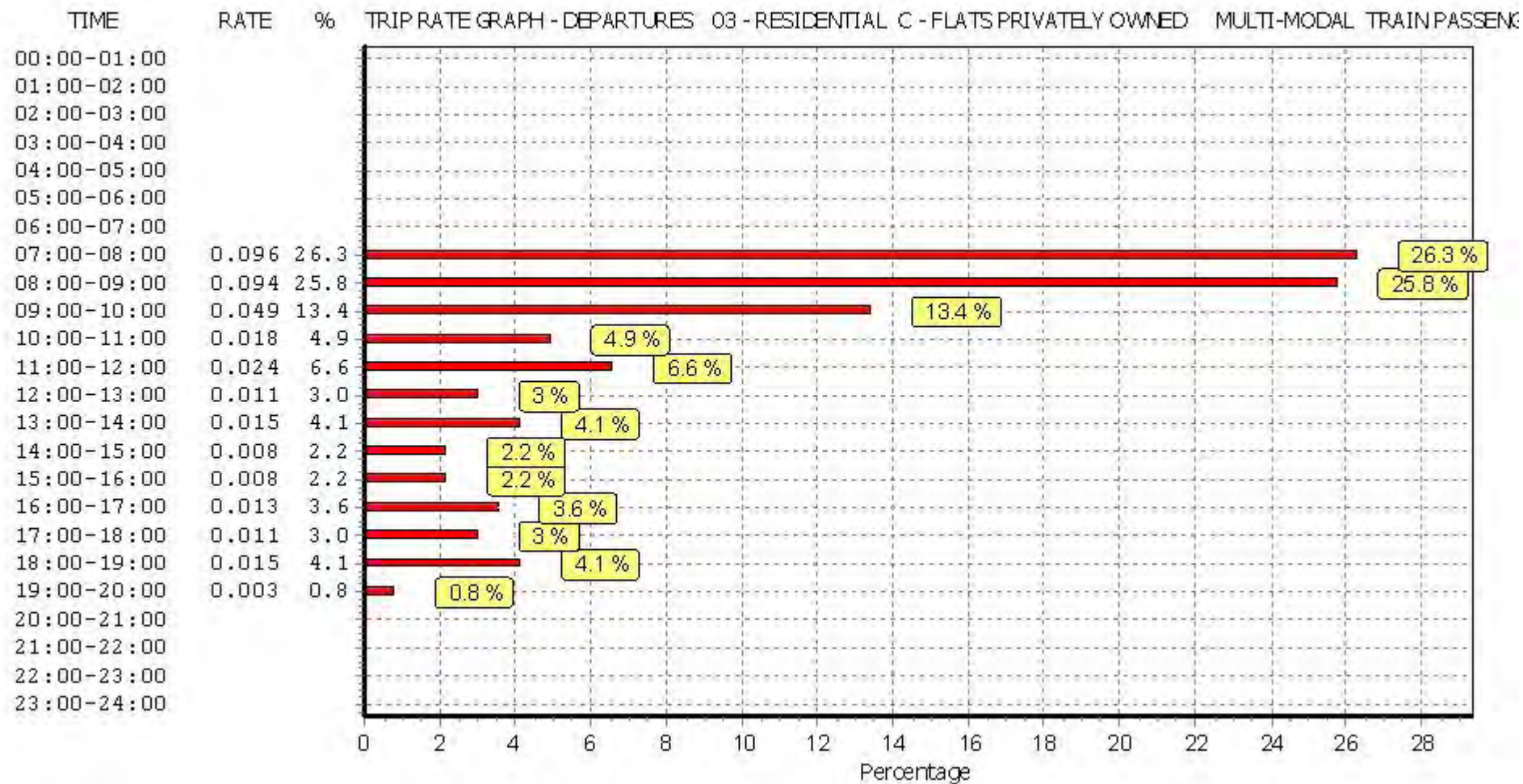


This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



OFF-LINE VERSION

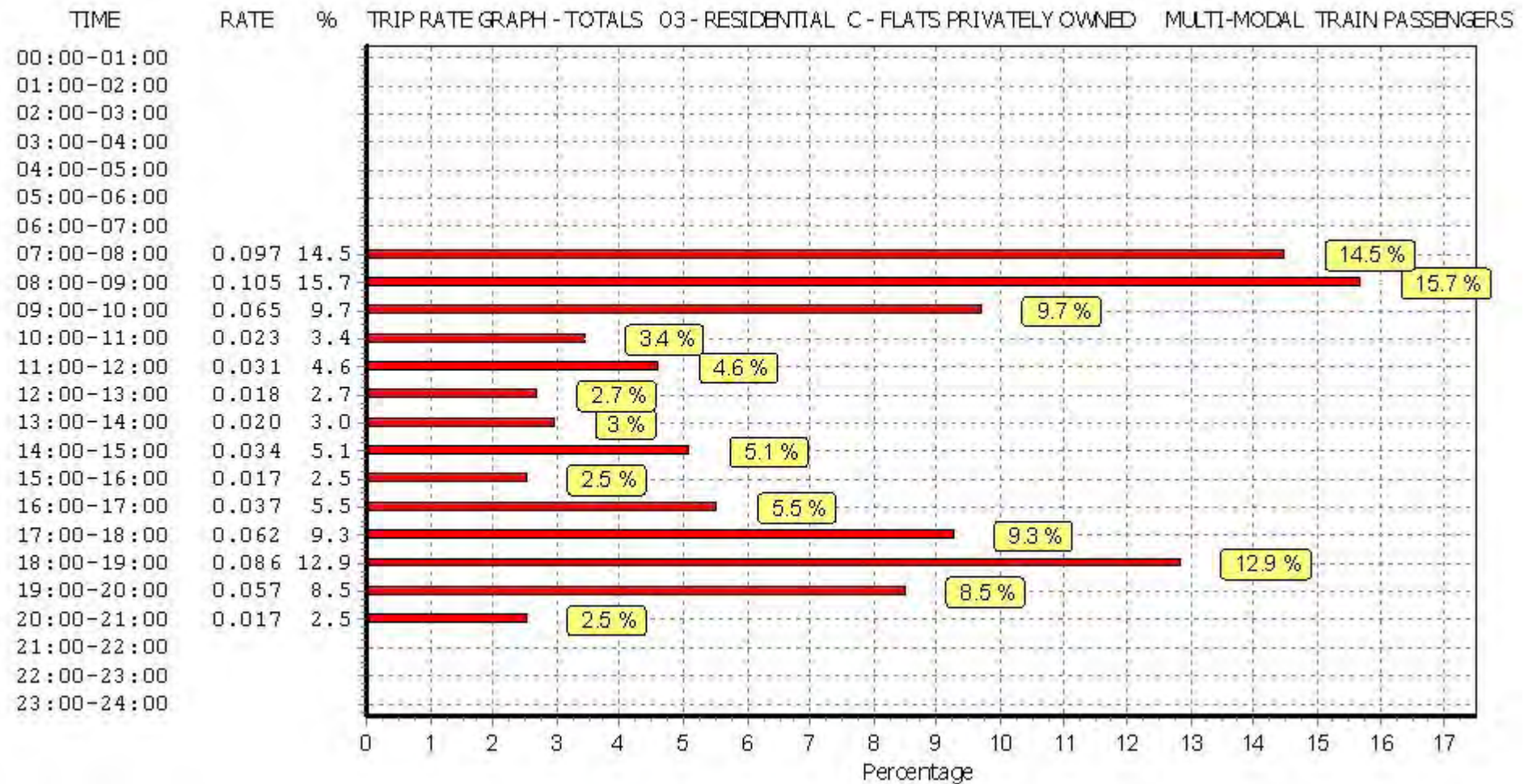
Licence No: 142301



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

OFF-LINE VERSION

Licence No: 142301



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

OFF-LINE VERSION

Licence No: 142301

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED  
 MULTI-MODAL COACH PASSENGERS  
 Calculation factor: 1 DWELLS  
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	12	62	0.000	12	62	0.000	12	62	0.000
08:00 - 09:00	12	62	0.000	12	62	0.000	12	62	0.000
09:00 - 10:00	12	62	0.000	12	62	0.000	12	62	0.000
10:00 - 11:00	12	62	0.000	12	62	0.000	12	62	0.000
11:00 - 12:00	12	62	0.000	12	62	0.000	12	62	0.000
12:00 - 13:00	12	62	0.000	12	62	0.000	12	62	0.000
13:00 - 14:00	12	62	0.000	12	62	0.000	12	62	0.000
14:00 - 15:00	12	62	0.000	12	62	0.000	12	62	0.000
15:00 - 16:00	12	62	0.000	12	62	0.000	12	62	0.000
16:00 - 17:00	12	62	0.000	12	62	0.000	12	62	0.000
17:00 - 18:00	12	62	0.000	12	62	0.000	12	62	0.000
18:00 - 19:00	12	62	0.000	12	62	0.000	12	62	0.000
19:00 - 20:00	1	294	0.000	1	294	0.000	1	294	0.000
20:00 - 21:00	1	294	0.000	1	294	0.000	1	294	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:		0.000			0.000			0.000	

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is:  $COUNT/TRP*FACT$ . Trip rates are then rounded to 3 decimal places.

#### Parameter summary

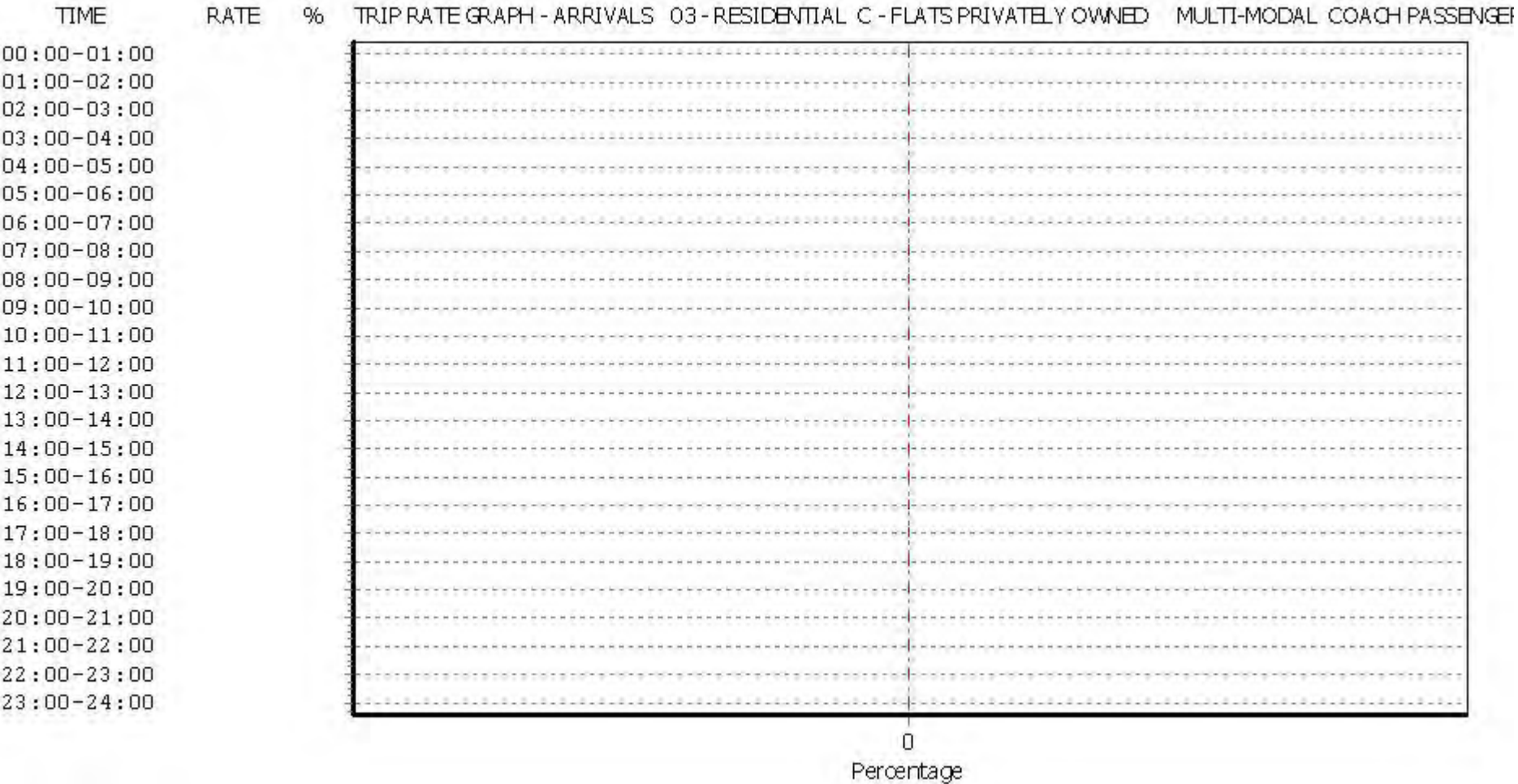
Trip rate parameter range selected: 9 - 294 (units: )  
 Survey date range: 01/01/05 - 11/05/12  
 Number of weekdays (Monday-Friday): 12  
 Number of Saturdays: 0  
 Number of Sundays: 0  
 Surveys manually removed from selection: 0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.



OFF-LINE VERSION

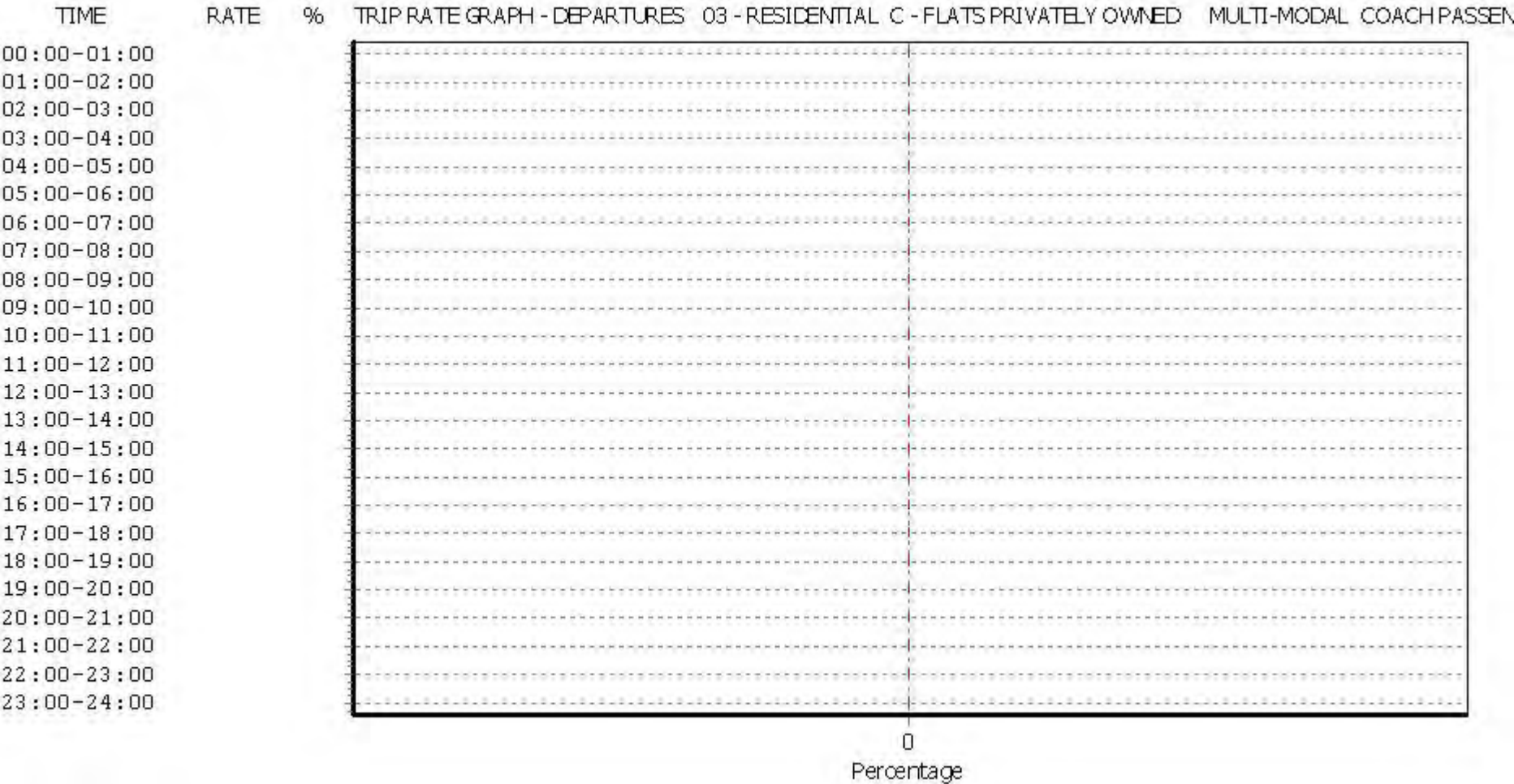
Licence No: 142301



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

OFF-LINE VERSION

Licence No: 142301

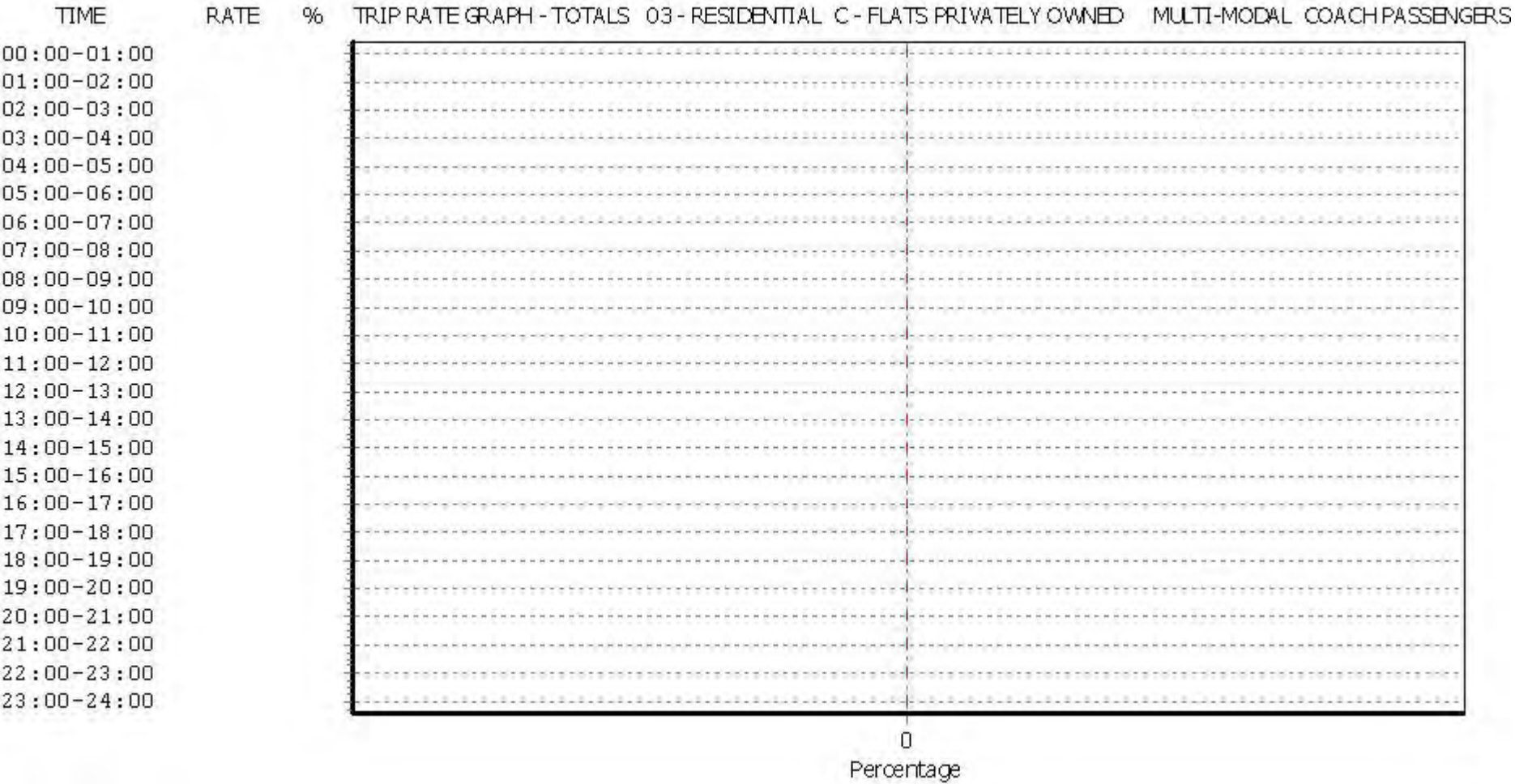


This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



OFF-LINE VERSION

Licence No: 142301



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED  
MULTI-MODAL PUBLIC TRANSPORT USERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	12	62	0.009	12	62	0.150	12	62	0.159
08:00 - 09:00	12	62	0.027	12	62	0.183	12	62	0.210
09:00 - 10:00	12	62	0.024	12	62	0.081	12	62	0.105
10:00 - 11:00	12	62	0.008	12	62	0.044	12	62	0.052
11:00 - 12:00	12	62	0.016	12	62	0.042	12	62	0.058
12:00 - 13:00	12	62	0.015	12	62	0.035	12	62	0.050
13:00 - 14:00	12	62	0.024	12	62	0.030	12	62	0.054
14:00 - 15:00	12	62	0.035	12	62	0.038	12	62	0.073
15:00 - 16:00	12	62	0.049	12	62	0.019	12	62	0.068
16:00 - 17:00	12	62	0.071	12	62	0.042	12	62	0.113
17:00 - 18:00	12	62	0.102	12	62	0.020	12	62	0.122
18:00 - 19:00	12	62	0.117	12	62	0.023	12	62	0.140
19:00 - 20:00	1	294	0.092	1	294	0.010	1	294	0.102
20:00 - 21:00	1	294	0.037	1	294	0.000	1	294	0.037
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:		0.626			0.717			1.343	

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

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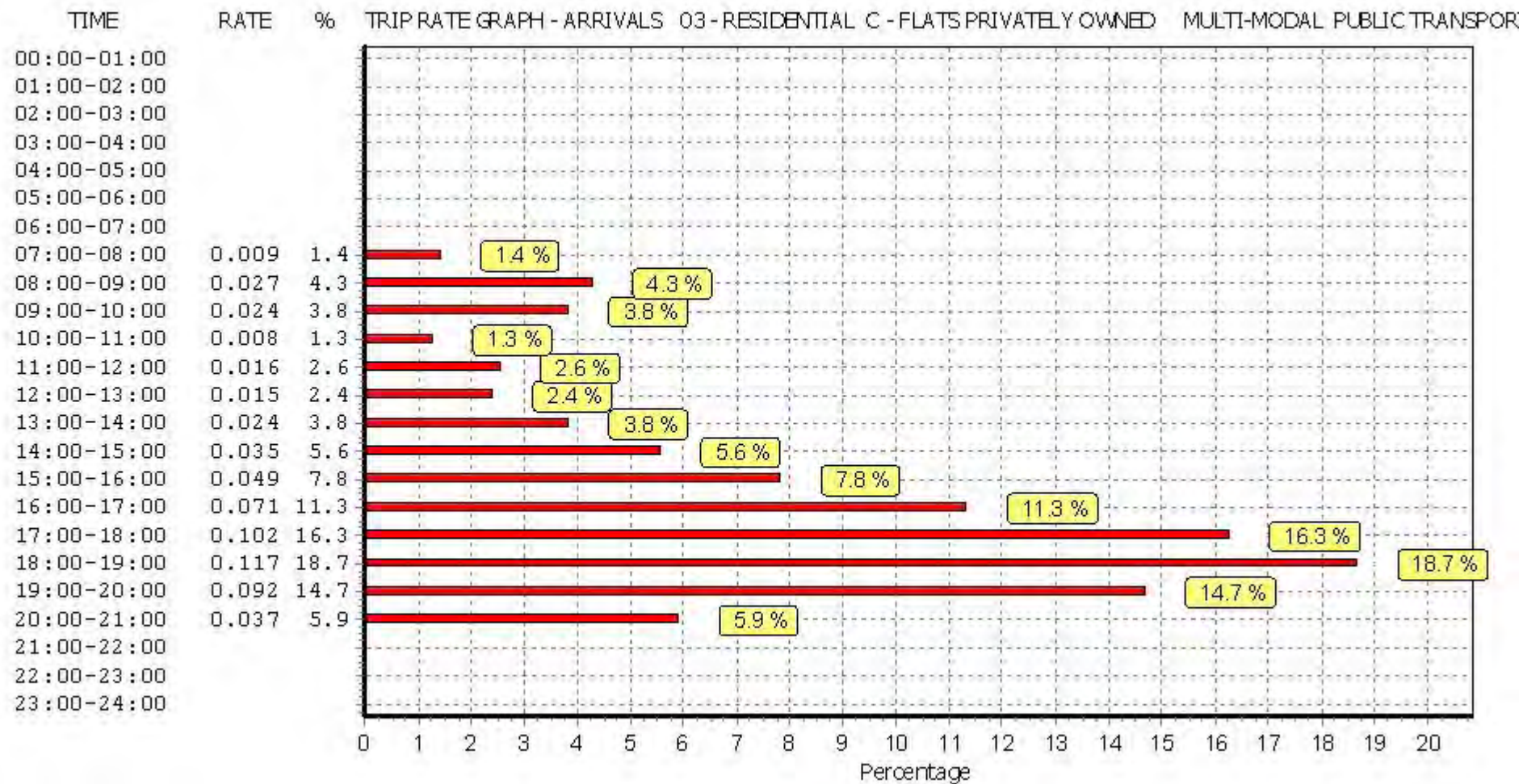
#### Parameter summary

Trip rate parameter range selected: 9 - 294 (units: )  
 Survey date range: 01/01/05 - 11/05/12  
 Number of weekdays (Monday-Friday): 12  
 Number of Saturdays: 0  
 Number of Sundays: 0  
 Surveys manually removed from selection: 0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

OFF-LINE VERSION

Licence No: 142301

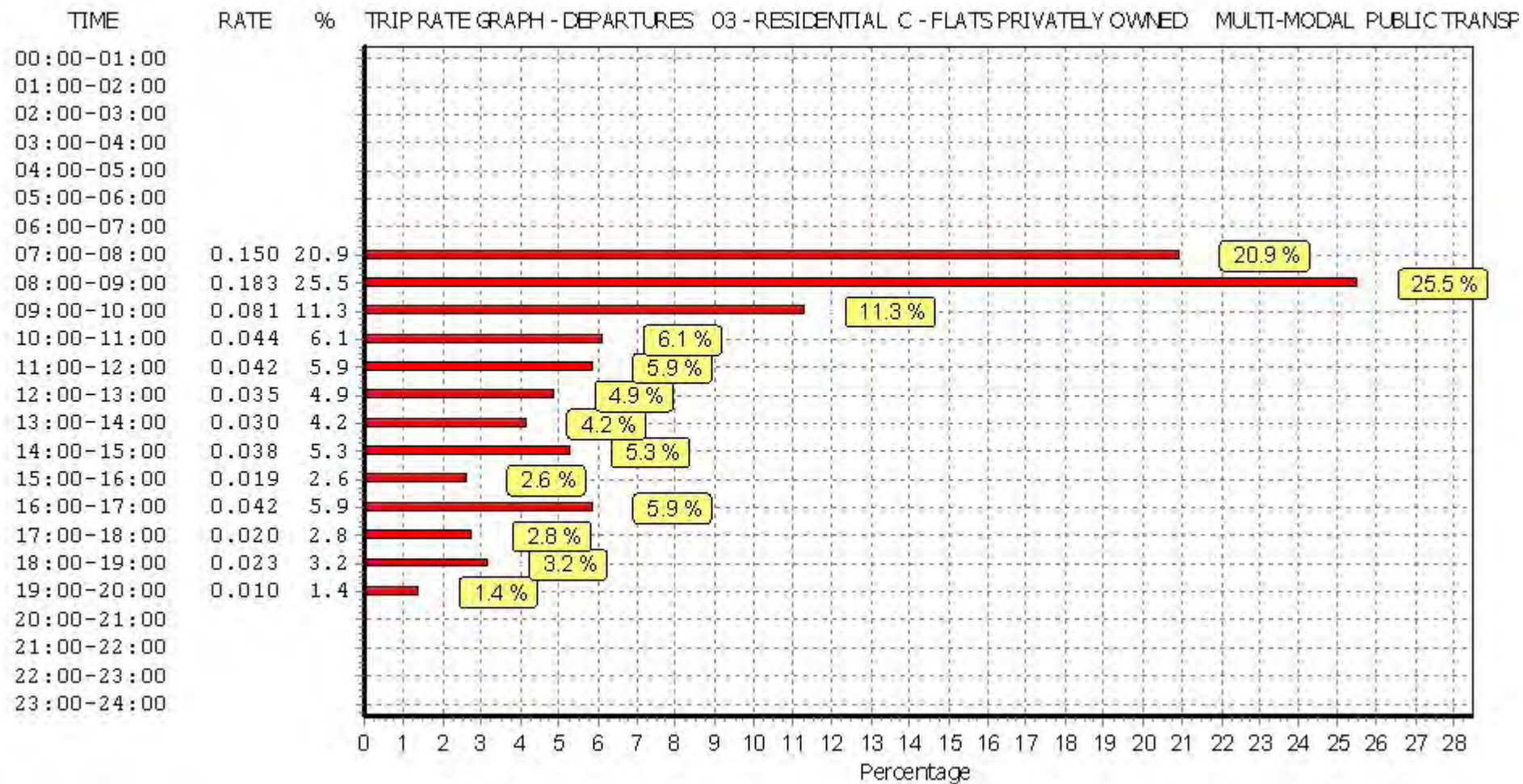


This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



OFF-LINE VERSION

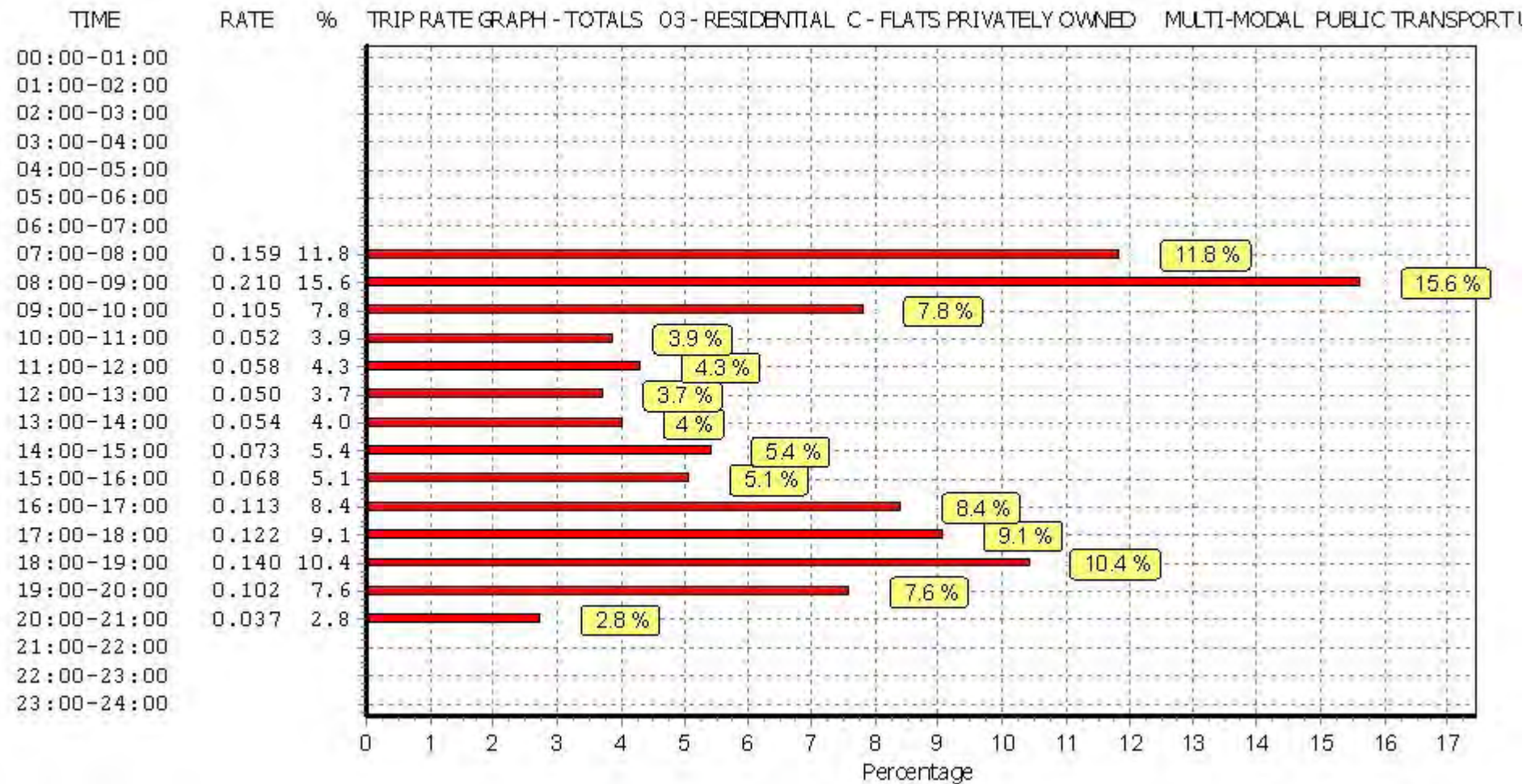
Licence No: 142301



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OFF-LINE VERSION

Licence No: 142301



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OFF-LINE VERSION

Licence No: 142301

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	12	62	0.049	12	62	0.305	12	62	0.354
08:00 - 09:00	12	62	0.129	12	62	0.609	12	62	0.738
09:00 - 10:00	12	62	0.135	12	62	0.233	12	62	0.368
10:00 - 11:00	12	62	0.082	12	62	0.175	12	62	0.257
11:00 - 12:00	12	62	0.139	12	62	0.148	12	62	0.287
12:00 - 13:00	12	62	0.158	12	62	0.164	12	62	0.322
13:00 - 14:00	12	62	0.148	12	62	0.164	12	62	0.312
14:00 - 15:00	12	62	0.154	12	62	0.170	12	62	0.324
15:00 - 16:00	12	62	0.292	12	62	0.131	12	62	0.423
16:00 - 17:00	12	62	0.241	12	62	0.146	12	62	0.387
17:00 - 18:00	12	62	0.363	12	62	0.173	12	62	0.536
18:00 - 19:00	12	62	0.353	12	62	0.158	12	62	0.511
19:00 - 20:00	1	294	0.286	1	294	0.112	1	294	0.398
20:00 - 21:00	1	294	0.187	1	294	0.102	1	294	0.289
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:		2.716			2.790			5.506	

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

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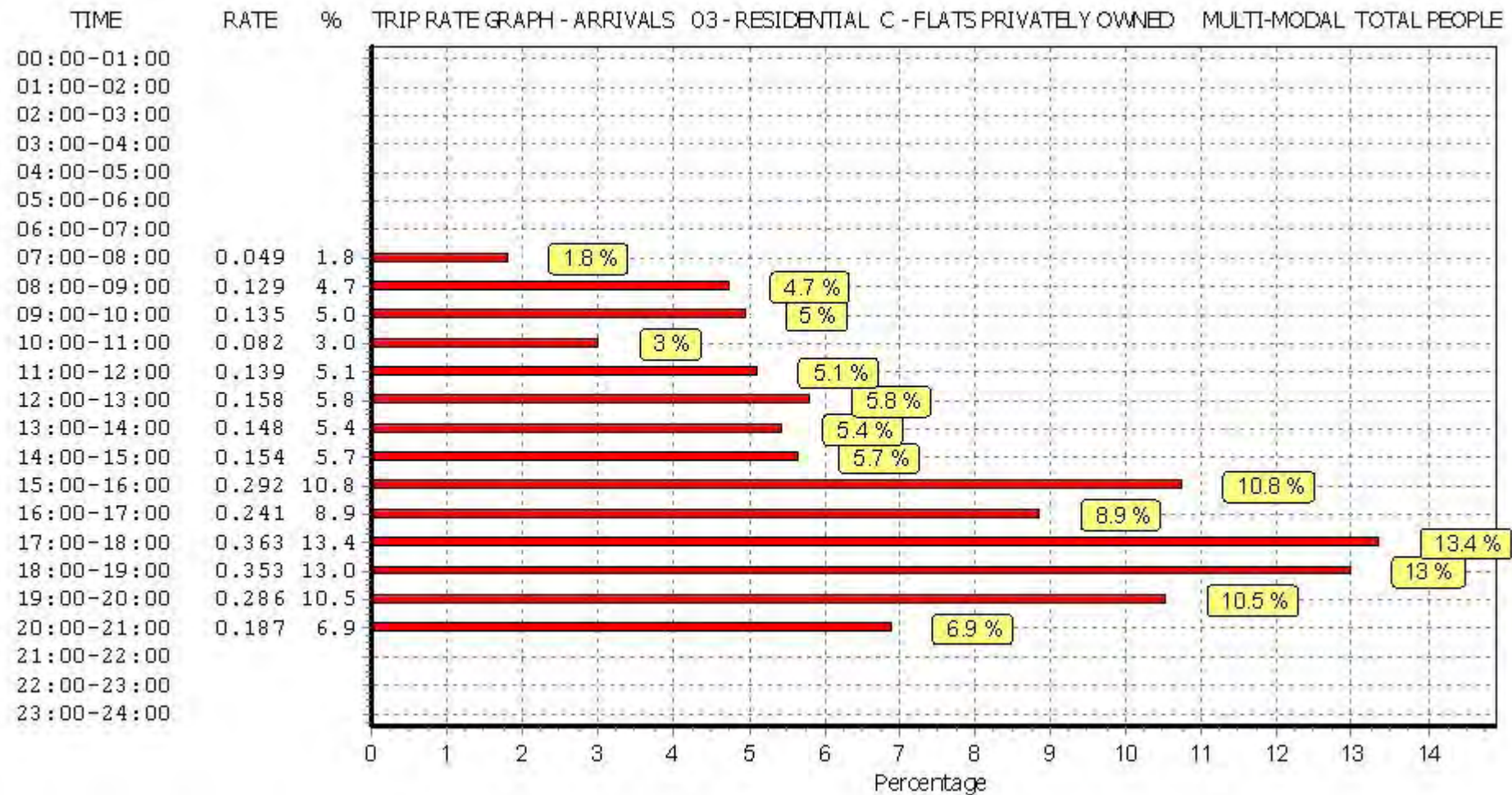
#### Parameter summary

Trip rate parameter range selected: 9 - 294 (units: )  
 Survey date range: 01/01/05 - 11/05/12  
 Number of weekdays (Monday-Friday): 12  
 Number of Saturdays: 0  
 Number of Sundays: 0  
 Surveys manually removed from selection: 0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

OFF-LINE VERSION

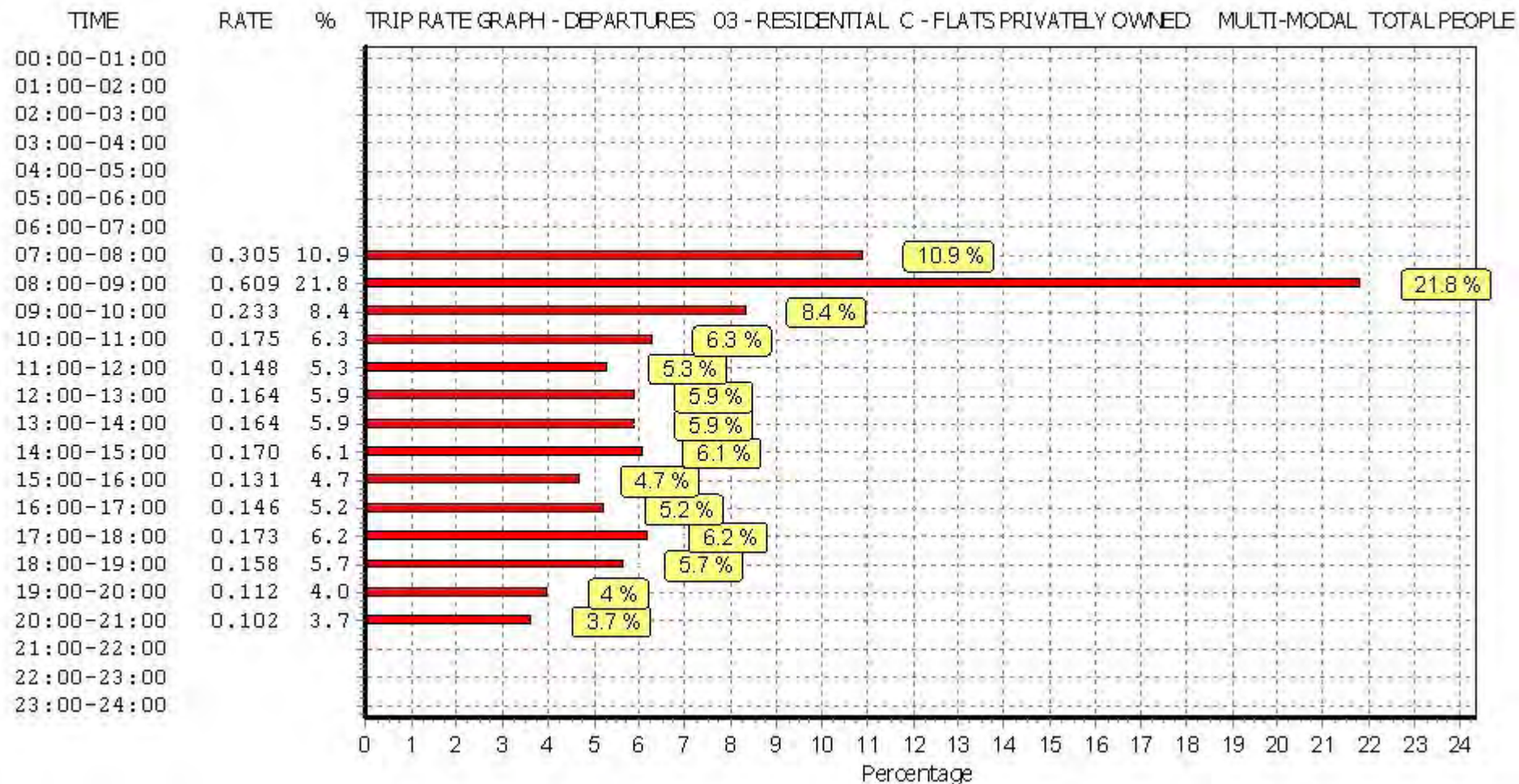
Licence No: 142301



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

OFF-LINE VERSION

Licence No: 142301

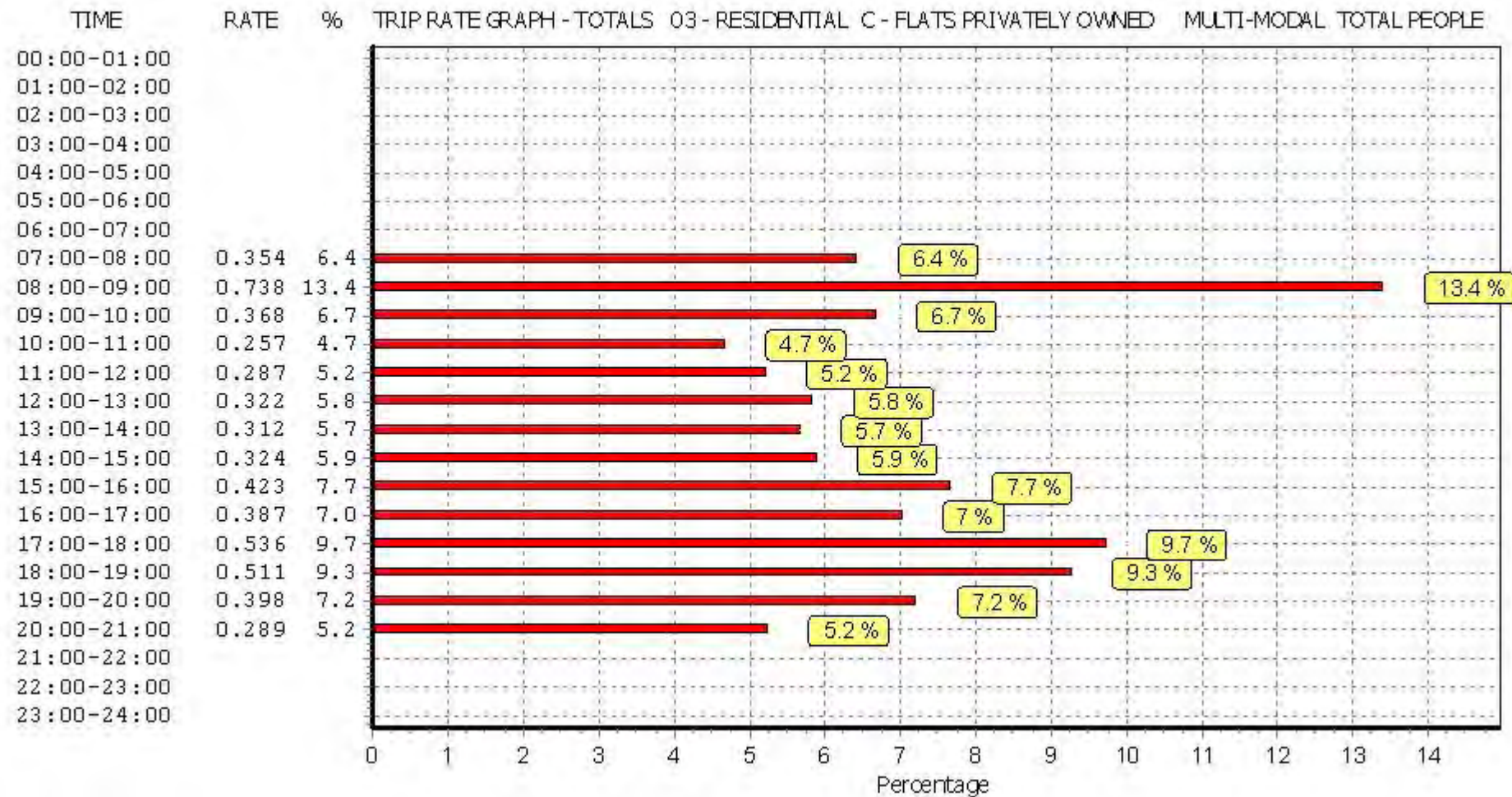


This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



OFF-LINE VERSION

Licence No: 142301



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

8 January 2015

## UNIT AREA ANALYSIS

LOCATION	FLAT NO	TYPE	GIA Actual m <sup>2</sup>	GIA Target m <sup>2</sup>	ROOM NAME	AREA Actual m <sup>2</sup>
Basement	1	2B/4p	98.9	70.0	Kitchen/dining/living Bedroom 1 Bedroom 2 Amenity Storage	39.3 18.5 14.5 11.2 2.4
Basement	2	2B/3p	96.3	61.0	Kitchen/dining/living Bedroom 1 Bedroom 2 Amenity Storage	43.9 20.2 9.2 21.4 1.3
Ground	3	2B/3p	60.5	61.0	Kitchen/dining/living Bedroom 1 Bedroom 2 Amenity Storage	25.0 14.5 7.3 37.2 1.8
Ground	4	1B/1p	36.4	37.0	Kitchen/dining/living Bedroom Amenity Storage	19.6 7.9 15.3 1.0
Ground	5	2B/3p	61.4	61.0	Kitchen/dining/living Bedroom 1 Bedroom 2 Amenity Storage	27.3 11.3 7.3 7.0 1.8
Ground	6	2B/3p	59.9	61.0	Kitchen/dining/living Bedroom 1 Bedroom 2 Amenity Storage	23.6 13.2 7.3 5.4 1.0
First	7	4B/5p	95.7	90.0	Kitchen/dining/living Bedroom 1 Bedroom 2 Bedroom 3 Bedroom 4 Amenity Storage	34.5 13.5 8.8 10.1 7.3 5.7 2.1
First	8	2B/4p	69.8	70.0	Kitchen/dining/living Bedroom 1 Bedroom 2 Amenity Storage	28.8 14.0 12.2 2.5 2.6



8 January 2015

**UNIT AREA ANALYSIS**

LOCATION	FLAT NO	TYPE	GIA Actual m <sup>2</sup>	GIA Target m <sup>2</sup>	ROOM NAME	AREA Actual m <sup>2</sup>
First	9	2B/4p	82.1	70.0	Kitchen/dining/living	36.1
					Bedroom 1	15.5
					Bedroom 2	12.0
					Amenity	3.5
					Storage	2.6
Second	10	1B/2p	54.7	50.0	Kitchen/dining/living	30.8
					Bedroom	11.7
					Amenity	10.0
					Storage	1.0
Second	11	4B/5p	96.1	90.0	Kitchen/dining/living	34.5
					Bedroom 1	13.5
					Bedroom 2	8.8
					Bedroom 3	10.1
					Bedroom 4	7.3
					Amenity	5.7
Second	12	2B/4p	69.8	70.0	Storage	2.1
					Kitchen/dining/living	28.8
					Bedroom 1	14.0
					Bedroom 2	12.2
					Amenity	2.5
Second	13	2B/4p	77.7	70.0	Storage	2.6
					Kitchen/dining/living	31.7
					Bedroom 1	15.5
					Bedroom 2	12.0
					Amenity	3.9
Third	14	3B/4p	77.6	74.0	Storage	2.6
					Kitchen/dining/living	26.5
					Bedroom 1	12.0
					Bedroom 2	9.0
					Bedroom 3	9.3
					Amenity	6.6
Third	15	2B/4p	74.7	70.0	Storage	3.2
					Kitchen/dining/living	25.0
					Bedroom 1	19.7
					Bedroom 2	12.1
					Amenity	3.3
Third	16	3B/4p	84.5	70.0	Storage	3.1
					Kitchen/dining/living	34.2
					Bedroom 1	13.2
					Bedroom 2	10.1
					Bedroom 3	7.3
					Amenity	16.2
Third	16	3B/4p	84.5	70.0	Storage	1.3
					Kitchen/dining/living	34.2
					Bedroom 1	13.2
					Bedroom 2	10.1
					Bedroom 3	7.3

8 January 2015

**UNIT AREA ANALYSIS**

LOCATION	FLAT NO	TYPE	GIA Actual m <sup>2</sup>	GIA Target m <sup>2</sup>	ROOM NAME	AREA Actual m <sup>2</sup>
Third	17	1B/2p	46.9	50.0	Kitchen/dining/living	24.7
					Bedroom	10.8
					Amenity	14.6
					Storage	1.1

1B/1p = 1      Flat No: 4

1B/2p = 2      Flat Nos 10, 17

2B/3p = 5      Flat Nos: 2, 3, 5, 6, 15

2B/4p = 5      Flat Nos: 1, 8, 9, 12, 13

3B/4p = 2      Flat Nos: 14, 16

4B/5p = 2      Flat Nos: 7, 11

**TOTAL = 17****FOOTPRINT**

Existing	522.68 sqm
Proposed	585.61 sqm
Roof garden (communal)	70.0 sqm

1a Hungerford Road  
London N7 9LA  
Tel.: +44 (0) 20 7607 0072  
Fax: +44 (0) 20 7687 0114  
Mobile: +44 (0) 77 6984 2149  
E-mail: davidmatzdorf@blueyonder.co.uk

4 March 2015

## **PROPOSED EXTENSION, CONVERSION & REPAIR OF 399/401 HIGH ROAD LONDON N17 6QN**

### **AFFORDABLE HOUSING REPORT ON AFFORDABLE HOUSING VIABILITY APPRAISAL**

## A INTRODUCTION AND BACKGROUND

We have been instructed by Tottenham War Services Institute and by Ordan UK Ltd to carry out a viability assessment of this proposed development, to appraise the financial viability of providing affordable housing, using the HCA's 'Development Appraisal Tool' model; the results are below.

This report is supported by and should be read in conjunction with the separate valuation report prepared by Mr Tim Smee FRICS. Open market values, rent levels, yields and existing use valuations used in the viability assessment, for residential and non-residential elements of the proposal, are all as advised by Mr Smee.

The report also refers to an elemental build cost estimate prepared by Mr Philip Vacher MCIOB of Consultancy 31 Cost Consultants, to which we have added an analysis of the build costs between the residential and non-residential components of the proposed works (see Appendix C).

This is an unusual project. The existing premises comprise a Grade II listed building that has been owned by a charitable organisation, the Tottenham War Services Institute (TWSI), since the 1920s. TWSI's charitable objects are:

"the benefit and general welfare of ex-service personnel over 50 years of age, their families and dependents, and for such other charitable purposes as the managing trustees from time to time think fit."

Amongst the activities that TWSI carries out for the benefit of the people of Tottenham are:

- The operation of the "T-Chances" club at 399 High Rd.
- Provision of accommodation for a separate local mental health charity which recently has suffered from funding cuts and loss of accommodation elsewhere.
- Provision of a meeting and presentation place for "Survivors Poetry", a local mental health group.
- Provision of peer group to peer group support in terms of music and drama, including space to rehearse and teach.

The building and the club require repair, improvement and restoration, the last because the original listed building was poorly rebuilt after a fire in 1985. In addition, the charity needs to establish an endowment that will provide it with a source of income and financial stability over the long term.

TWSI enlisted the assistance of Ordan UK, an experienced residential developer, to help to secure its finances and its future by carrying out a residential enabling development. . In exchange for rights to construct new housing at 399/401s High Rd, Ordan will refurbish and construct an improved club facility on the premises, will restore the building closer to its historical appearance and will return the ownership of some of the completed housing units back to TWSI for no payment (number of flats to be agreed). TWSI will then rent or lease its flats to persons in need who meet their criteria, i.e., "ex-service personnel over 50 years of age, their families and dependents" from Haringey, and will use the income from these flats to secure the long term future of its other charitable operations.

Because the works to improve the T-Chances facilities and to restore the listed building are expensive and the value of the completed T-Chances property is modest, Ordan argued that its provision of housing units to support TWSI's local charitable work should be in lieu of affordable housing, or that affordable housing could be provided in the form of shared ownership, as long as the shared ownership units could be directly owned and managed by TWSI and not by a local housing association.

This negotiation did not come to fruition and at that point we were briefed to prepare a viability assessment, to establish whether conventional affordable housing is financially feasible for this site.

## B ASSUMPTIONS

Bespoke assumptions used in the appraisals and the reasons for them are listed below:

- 1 **Build Cost:** A detailed elemental build cost analysis has been provided by Consultancy 31 Cost Consultants. This can be seen in Appendix C.

We have added to this cost estimate detailed breakdowns to separate the residential and commercial costs of the development, (a) because these figures must be entered separately in the DAT appraisal and (b) because it sheds light on which aspects of the development are profitable and which are not.

We have also added a re-analysis at the end of the build cost breakdown, separating the figures into the build cost categories required by the residential part of the DAT appraisal, along with a summary of the residential and non-residential floor areas.

However, the DAT does not provide for a detailed analysis of build costs for non-residential uses, which form a significant part of this development. We have been forced to enter all of the itemised costs in respect of demolition, services, listed building repairs, landscaping, external works and car parking in the residential costs section of the appraisal, which somewhat distorts the cost per m<sup>2</sup> for residential and non-residential works as presented in the DAT.

Based on our own analysis, the basic build cost works out @ £1,409/m<sup>2</sup> (gross internal) for the residential element and @ £1,536/m<sup>2</sup> (gross internal) for the non-residential element.

The build cost of the non-residential premises is higher than normal as a result of several factors:

- The listed building repairs, which affect both parts of the scheme. Based on gross internal floor area, £50,767 of these costs have been apportioned to the non-residential facilities and £89,767 have been apportioned to the residential element.
  - The abnormal costs associated with the basement performance space. Based on the gross internal floor area of newly excavated basement spaces only, £618,329 of these costs have been apportioned to the non-residential facilities and £182,022 have been apportioned to the residential element.
- 2 **Community Infrastructure Levy:** A detailed calculation of CIL is shown in Appendices A & B and has been incorporated onto the 'Notes & Memos' worksheet of the DAT. There is a net loss of non-residential floor area, resulting in a negative CIL adjustment for the non-residential uses, so we have shown the entire net CIL contribution of £71,816 in the 'Residential Costs' section of the DAT.
  - 3 **Code for Sustainable Homes:** We have not made any allowance for costs associated with compliance with the C4SH; a provision for certification costs is included in the overall provision for professional fees.
  - 4 **Developer's Return:** We have adopted a developer's return of 17% on value for the private residential, hall, clubhouse and office uses.
  - 5 **Open Market Value, Market Rents and Ground Rents (including capitalisation):** All as advised in the report from Tim Smee FRICS supplied herewith. We have shown ground rents @ £250 for all private sale units, with a 6.5% yield. See also the schedule of accommodation in Appendix D.
  - 6 **Professional fees:** The applicant will incur professional fees approximating to 10% of the basic build cost as shown on the DAT, which excludes itemised costs such as demolition, services, landscaping, external works and listed buildings repairs.



- 7 Financing: We have shown an interest rate of 5.0% and finance arrangement fees @ 2% based on 70% of build costs.
- 8 Acquisition costs: The DAT calculates these based on the original land price, which is historical (TWSI have owned the premises since the 1920s), so no costs are shown.
- 9 Sales & Marketing fees: We have provided for sales fees @ 2%. Legal fees are @ £1,000 per unit. Agent's private rental letting fees are @ 5% of year 1 rental.
- 10 Key dates:
  - Works to start on site in October 2015
  - 18 month construction period, with Practical Completion in April 2017
  - Sales commencing 2 months prior to Practical Completion and taking 4 months to complete
  - No rent free period for non-residential space

## C DISCUSSION OF VALUATIONS AND VIABILITY

This is a building with an unusual established use. It provides a music and entertainment venue, supported by community use facilities and associated offices. The value of the music venue is based on its potential rental income and, for reasons explained in the valuation report, upgrading the music venue to a space of higher quality does not add capital value to the premises, although it is necessary in order to improve the listed building and to secure the future of the facility. In order to avoid causing nuisance for the enabling residential development, the performance space must be a heavily acoustically-insulated and subterranean space and this has substantial implications for the build cost.

The office spaces on the upper stories of the existing building will be subjected to basic decorative improvements and we have allowed for a modest increase in their rental value, but this is offset by a reduction in floor space of the T-Chances premises. The net result is that, despite the cost of improving and repairing the existing listed building and constructing the new performance space, there is no added value in the non-residential element of the building.

This was anticipated and is exactly why an enabling residential development is needed: to provide financial viability for the primary objectives of the project, which are:

- To secure TWSI's long term future as a provider of charitable services to the people of Haringey;
- To meet the costs of restoring and upgrading the listed building.

A re-analysis of the totals shown in the DAT viability assessment reveals the degree to which the residential development is needed to subsidise the non-residential facilities:

- There is no increase in the capital value of the T-Chances premises, but apportioned costs to repair and improve the listed building and to construct the performance space amount to almost £1.45m, including build costs and professional fees:
 

• Basic build cost (including contingency)	£1,300k
• Fees and certification	135k
- The residential development, assuming no affordable housing, has a value of almost £4.5m and its costs total £3.0m, before allowing for a developer's margin:
 

• Basic build cost (including contingency)	£2,200k
• External Works & Infrastructure Costs	110k
• Fees and certification	210k
• CIL	70k
• Marketing & Sales	100k
• Finance costs & interest	310k

The net added value of the residential development is absorbed by the costs of the non-residential development. Once we include an allowance for a developer's margin of 17% – a figure suitable for a typical new build development and perhaps a bit modest for the restoration of a listed building – there is no scope to provide conventional affordable housing and still achieve the primary charitable objectives of the development.

Although there is no provision for affordable housing, the applicant nevertheless intends that a percentage of the 17 residential units will be transferred back to TWSI, to provide accommodation that meets the requirements of its charitable objects as described in section A of this report, as well as providing TWSI with a rental income to secure its future.

## **D SUMMARY OF RESULTS**

### **1 Appraisal no. 1: 100% private housing for sale**

- See detailed reports from Development Appraisal Tool appraisal in Appendix A.
- With the residential units developed for open market sale, the development produces a present value deficit of £795,605 and a deficit at completion of £895,169.

### **2 Appraisal no. 2: 100% private rented housing**

- See detailed reports from Development Appraisal Tool appraisal in Appendix B.
- With the residential units developed for open market rent, the development produces a present value deficit of £638,647 and a deficit at completion of £718,569.

## **E CONCLUSIONS**

The scheme is not viable with any amount of affordable housing, either for open market rent or for open market sale.



David Matzdorf  
AFFORDABLE HOUSING CONSULTANT



### Car Parking

No. of Spaces	Price per Space (£)	Value
10	-	£0

Value of Residential Car Parking

£0

Car Parking Build Costs

£18,750

### Ground rent

Capitalised annual  
ground rent

Social Rented

£0

Shared Ownership

£0

Affordable Rent

£0

Open market (all phases)

£65,385

**Capitalised Annual Ground Rents**

**£65,385**

**TOTAL CAPITAL VALUE OF RESIDENTIAL SCHEME**

**£4,480,385**

**TOTAL BUILD COST OF RESIDENTIAL SCHEME**

**£2,196,630**

**TOTAL CONTRIBUTION OF RESIDENTIAL SCHEME**

**£2,283,755**

### Non-Residential

Office

Cost

Values

Retail

£0

£0

Industrial

£0

£0

Leisure

£0

£0

Community Use

£1,476,649

£700,000

Community Infrastructure Levy

£0

**CAPITAL VALUE OF NON-RESIDENTIAL SCHEME**

**£700,000**

**COSTS OF NON-RESIDENTIAL SCHEME**

**£1,476,649**

**CONTRIBUTION TO SCHEME COSTS FROM NON-RESIDENTIAL**

**-£776,649**

**GROSS DEVELOPMENT VALUE OF SCHEME**

**£5,180,385**

**TOTAL BUILD COSTS**

**£3,673,279**

**TOTAL CONTRIBUTION TO SCHEME COSTS**

**£1,507,106**

### External Works & Infrastructure Costs (£)

Site Preparation/Demolition

£33,500

Per unit

1,971

Roads and Sewers

£0

Services (Power, Water, Gas, Telco and IT)

£55,000

3,235

Strategic Landscaping

£10,000

588

Off Site Works

£0

Public Open Space

£0

Site Specific Sustainability Initiatives

£0

Plot specific external works

£11,250

662

Other 1

£0

Other 2

£0

**£109,750**

### Other site costs

Fees and certification

10.0%

£213,462

12,557

Other Acquisition Costs (£)

£0

### Site Abnormals (£)

De-canting tenants

£0

Decontamination

£0

Other

£140,534

8,267

Other 2

£0

Other 3

£0

Other 4

£0

Other 5

£0

**£140,534**

**Total Site Costs inc Fees**

**£463,746**

27,279

### Statutory 106 Costs (£)

Education

£0

Sport & Recreation

£0

Social Infrastructure

£0

Public Realm

£0

Affordable Housing

£0

Transport

£0

Highway

£0

Health

£0

Public Art

£0

Flood work

£0

Community Infrastructure Levy

£71,816

4,224

Other Tariff

£0

Other 1

£0

Other 2

£0

Other 3

£0

Other 4

£0

**Statutory 106 costs**

**£71,816**

4,224

<b>Marketing (Open Market Housing ONLY)</b>			
Sales/letting Fees	2.0%	£88,300	per OM unit 5,194
Legal Fees (per Open Market unit):	£1,000	£17,000	1,000
<b>Marketing (Affordable Housing)</b>			
Developer cost of sale to RP (£)		£0	per affordable unit
RP purchase costs (£)		£0	
Intermediate Housing Sales and Marketing (£)		£0	
<b>Total Marketing Costs</b>		<b>£105,300</b>	
<b>Total Direct Costs</b>		<b>£4,314,141</b>	
<b>Finance and acquisition costs</b>			
Land Payment		£700,000	41,176 per OM home 61,946,903 per hectare
Arrangement Fee		£51,426	19.8% of interest
Misc Fees (Surveyors etc)		£0	0.00% of scheme value
Agents Fees		£0	
Legal Fees		£0	
Stamp Duty		£0	
Total Interest Paid		£259,437	
<b>Total Finance and Acquisition Costs</b>		<b>£1,010,863</b>	
<b>Developer's return for risk and profit</b>			
<b>Residential</b>			
Market Housing Return (inc OH) on Valt	17.0%	£750,550	44,150 per OM unit
Affordable Housing Return on Cost	12.0%	£0	per affordable unit
Return on sale of Private Rent	0.0%	£0	#DIV/0! per PR unit
<b>Non-residential</b>			
Office	£0		
Retail	£0		
Industrial	£0		
Leisure	£0		
Community-use	£0	<b>£0</b>	
<b>Total Operating Profit</b>		<b>£750,550</b>	
(i.e. profit after deducting sales and site specific finance costs but before deducting developer overheads and taxation)			
<b>TOTAL COST</b>		<b>£6,075,553</b>	
<b>Surplus/(Deficit) at completion 1/7/2017</b>			<b>(£895,169)</b>
<b>Present Value of Surplus (Deficit) at 22/1/2015</b>			<b>(£795,605)</b>
<b>Scheme Investment IRR</b>			
	<b>5.3%</b>	(before Developer's returns and interest to avoid double counting returns)	
Site Value as a Percentage of Total Scheme Value	13.5%	Peak Cash Requirement	-£4,571,682
Site Value per hectare	-£79,218,475 per hectare	-£32,059,278 per acre	



## 2. SUPPORTING REPORTS

### A. Site details

HCA Development Appraisal Tool  
INPUT SHEET 1 - SITE DETAILS

Basic Site Details

#### FULL VIABILITY ASSESSMENT

Site Address	399/401 High Road London N17 6QN
OS X coordinate	
OS Y coordinate	
Site Reference	
File Source	C:\Data\Exceldata\Other Development\Development Appraisal Tool\High Rd 399
Scheme Description	Upgrade existing charitable club & offices & construct 17 new flats
Date of appraisal	22/01/2015
Gross Site Area (hectares)	0.01
Net Residential Site Area (hectares)	0.01
Author & Organisation	D W Matzdorf, Affordable Housing Consultant
Local Planning Authority	Haringey
Land Purchase Price	-
Land Purchase date	01/01/1929
Most recent valuation of the site £	700,000
Basis of valuation	Existing Use
Date of valuation	04/03/2015
Any note on valuation	
Developer of sale units	Ordan UK Ltd
Developer of affordable units	Other
Manager of affordable units	TBA
Registered Provider (where applicable)	
Note on applicant (eg sub partner status)	No affordable housing partner
Area	London

Site Payment is to be 'upfront'

### B. Residential phasing

HCA Development Appraisal Tool  
INPUT SHEET 3 - PHASING

Date of scheme appraisal	22-Jan-15	from Site Sheet	Month number	0		
Use any valid Excel Date format (eg DDMMYY)						
Build Period	Construction Start Date	Construction End Date	Construction Start Month no.	Construction End Month no.	No. of units in tenure	
Tenure phases display for date input only after transfer from Input 2 sheet						
OM 1:Phase 1	01-Oct-15	01-Apr-17	8	26	17	
RP Purchase from Developer	Purchase start date	Purchase end date	Start Month	End Month	No. of units in tenure	
AH phases display for date input only after transfer from Input 2 sheet						
Open Market Sale	Sale Start Date	Sale End Date	Start Month	End Month	No. of units in tenure	Monthly Sales rate
OM phases display for date input only after transfer from Input 2 sheet						
OM Sales1:Phase 1	01-Feb-17	01-Jun-17	24	28	17	3.40
Private Rental Units	First Rental Start Date	Final Rental Start Date	Start Month	End Month	No. of	
PR phases display for date input only after transfer from Input 2 sheet						
	Start Date	Month				
First Ground rent payment	01-May-17	27			250	

### C. Residential details

Free text Description	No. of units	m2	Property type	Tenure/phase	Sales Valuation £	Weekly Rent Chargeable
1	1	99	2 Bed Flat Low rise	Open Market Build phase 1	300,000	317.31
2	1	96	2 Bed Flat Low rise	Open Market Build phase 1	290,000	317.31
3	1	61	2 Bed Flat Low rise	Open Market Build phase 1	220,000	317.31
4	1	36	1 Bed Flat Low rise	Open Market Build phase 1	145,000	253.85
5	1	61	2 Bed Flat Low rise	Open Market Build phase 1	230,000	317.31
6	1	60	2 Bed Flat Low rise	Open Market Build phase 1	225,000	317.31
7	1	96	4 Bed + Flat Low rise	Open Market Build phase 1	310,000	438.46
8	1	70	2 Bed Flat Low rise	Open Market Build phase 1	260,000	317.31
9	1	82	2 Bed Flat Low rise	Open Market Build phase 1	300,000	317.31
10	1	55	1 Bed Flat Low rise	Open Market Build phase 1	220,000	253.85
11	1	96	4 Bed + Flat Low rise	Open Market Build phase 1	315,000	438.46
12	1	70	2 Bed Flat Low rise	Open Market Build phase 1	260,000	317.31
13	1	78	2 Bed Flat Low rise	Open Market Build phase 1	280,000	317.31
14	1	78	3 Bed Flat Low rise	Open Market Build phase 1	290,000	369.23
15	1	75	2 Bed Flat Low rise	Open Market Build phase 1	265,000	317.31
16	1	85	3 Bed Flat Low rise	Open Market Build phase 1	310,000	369.23
17	1	47	1 Bed Flat Low rise	Open Market Build phase 1	195,000	253.85

Annual Costs %	Manage ment %	Void & Bad Debt%	R&M inc sink Fund%	Net Yield %	Initial tranche sold %	Rent % unsold equity	Affordable % Market
Social Rented	12.0%	4.00%	1.00%	5.00%			
Shared Ownership	5.00%	2.00%		5.00%	35.00%	2.75%	
Affordable Rent	10.00%	4.00%	1.00%	5.00%			80%
Private Rent	10.0%	4.00%	1.00%	6.50%			

### D. Community Infrastructure Levy calculation

COMMUNITY INFRASTRUCTURE LEVY	Existing	Proposed	Increase (m²)	Local Authority		Local Authority	
				CIL/m²	Mayoral CIL/m²	CIL	Mayoral CIL
GIA (affordable)	0 m²	0 m²	0 m²	0	0	0	0
GIA (private)	0 m²	1,501 m²	1,501 m²	15	35	22,518	52,542
GIA (residential)	0 m²	1,501 m²	1,501 m²				
GIA (hall & clubhouse)	642 m²	543 m²	-99 m²	0	35	0	-3,451
GIA (office)	300 m²	306 m²	6 m²	0	35	0	206
GIA (total)	942 m²	2,350 m²	1,409 m²			22,518	49,298
LOCAL AUTHORITY CIL	22,518						
MAYORAL CIL	49,298						
<b>TOTAL CIL</b>	<b>71,816</b>						
<b>PRIVATE RESIDENTIAL M² (GROSS)</b>	<b>1,501</b>						
<b>TOTAL CIL/PRIVATE RESIDENTIAL M² (GROSS)</b>	<b>48</b>						

## E. Residential costs

Tenure phases display for Build Cost		Building Cost £ per Sq m GROSS area	Net to Gross Adjustment	Maximum height in floors (flats only)	Memo-Number of units	Avg Cost pu	Average unit size	Gross Area (sq m)	Build Cost to per Sq m
Shared Ownership phase 1	Low rise flats	1,409	17%	4	0	0	0.0	0	1,409
Affordable Rent phase 1	Low rise flats	1,409	17%	4	0	0	0.0	0	1,409
Open Market Phase 1:	Low rise flats	1,409	17%	4	17	103,056	73.1	1,501	1,409
Private Rental 1	Low rise flats	1,409	17%	4	0	0	0.0	0	1,409

Fees & Contingencies as % of Building Costs		%	£ Total
Design and Professional Fees % (Architects, QS, Project Management)		10.00%	213,462
Residential Building Contingencies (% of Building Costs)		2.93%	62,009

\* This section excludes Affordable Housing section 106 payments. All dates must be between 22-Jan-15 and 17-Jan-35. *Historic costs incurred earlier may be entered as 22-Jan-15 PROVIDED they are not taken into account in the site valuation (& hence double counted)*

External Works & Infrastructure Costs (£)	Comment on nature of issue	Cost (£)	Payment Start Date	Payment end date	Month of Payment Start	Month of Payment End	Cost per unit (all tenures)
Phase 1							
Site Preparation/Demolition		£33,500	01-Oct-15	01-Nov-15	8	9	1,971
Roads and Sewers		£0					
Services (Power, Water, Gas, Telco and IT)		£55,000	01-Mar-16	01-May-16	13	15	3,235
Strategic Landscaping		£10,000	01-Oct-16	01-Dec-16	20	22	588
Off Site Works		£0					
Public Open Space		£0					
Site Specific Sustainability Initiatives		£0					
Plot specific external works		£11,250	01-Oct-16	01-Dec-16	20	22	662
Other 1		£0					
Other 2		£0					

Site Abnormals (£)	Comment on nature of issue	Cost (£)	Payment Start Date	Payment end date	Month of Payment Start	Month of Payment End	Cost per unit (all tenures)
De-canting tenants							
Decontamination							
Other	Listed building repairs	£140,534	01-Dec-15	01-Jun-16	10	16	8,267
Other 2							
Other 3							
Other 4							
Other 5							

Building Costs (£ / car parking space)	Payment Date	Month of Payment
Residential Car Parking Building Costs (average cost / car parking space)	01-Feb-17	24
Total number of residential car parking spaces	(Open Market and Affordable)	

Note: Car park sales revenue can be entered using EAT style input sheet "Summary"

Statutory Payments (£)	Additional information	Cost (£)	Payment start date	Payment end date	Month of Payment Start	Month of Payment End	Per Private Unit	Total Value	Per Net Hectare
Education									
Sport & Recreation									
Social Infrastructure									
Public Realm									
Affordable Housing									
Transport									
Highway									
Health									
Public Art									
Flood work									
Community Infrastructure Levy	per sq metre	£48	01-Nov-15	01-Dec-15	9	10	4,224	71,816	4,234
Other Tariff	per sq metre								
Other 1									
Other 2									
Other 3									
Other 4									

### OTHER COSTS

SITE PURCHASE COSTS	%	£
Agents Fees (% of site cost)	2.00%	-
Legal Fees (% of site cost)	1.50%	-
Stamp Duty (% of site cost)	4.00%	-

Other Acquisition Costs (£)	Comment on nature of issue	Cost (£)	Payment start date	Payment end date	Month of Payment Start	Month of Payment End

### FINANCE COSTS

Arrangement Fee (£)	£51,426
Interest Rate (%)	5.00%
Misc Fees - Surveyors etc (£)	£0
Credit balance reinvestment %	6.00%

### MARKETING COSTS

Affordable Housing Marketing Costs

	Cost (£)	Payment start date	Payment end date	Month of Payment Start	Month of Payment End
Developer cost of sale to RP (£)	£0	01-Feb-17	01-May-17	24	27
RP purchase costs (£)	£0	01-Feb-17	01-May-17	24	27
Intermediate Housing Sales and Marketing (£)	£0	01-Feb-17	01-May-17	24	27

Open Market Housing Marketing Costs

		£ Total
Sales Fees (agents fees & marketing fees) - %	2.00%	88,300
Legal Fees (per Open Market unit) - £	£1,000	17,000
Agents Private Rental Initial Letting fees - %	5.00%	-

### DEVELOPER'S OVERHEAD AND RETURN FOR RISK (before taxation)

Developer O/head (£)		Return at Scheme end

Open Market Housing (% GDV)	17.00%	17.0%	inc Overheads
Private Rental (% Cost)	0.00%	44,150	per open market home
Affordable Housing (% Cost)	12.00%		

## F. Non-residential costs

<b>Community Use</b>		
Comments here		
Area of Community Use scheme (gross sq m)	849	
Area of Community Use scheme (net lettable sq m)	796	
<b>Values</b>		
Rent (£ psm pa)		69
Investor's Yield (%)	7.86%	
Costs of Sale (% of value)	0.00%	
<b>Building Costs</b>		
Community Use Building Costs (Gross, £ psm)		1,536
Community Use Building Professional Fees (% of building costs)	10.00%	
Building Contingencies (% of building costs)	2.91%	
CIL rate applicable (£ per m2 GIA)		-
<b>Phasing</b>		<b>Date</b>
Start of Building Period		01/10/2015
End of Building Period		01/04/2017
Timing of Letting / Sale		01/04/2017
Timing of CIL payment		01/11/2015
<b>Letting / sale fees</b>		
Letting (% of income)	0.00%	
Advertising (% of annual income)	0.00%	
Sale (% of sale price)	0.00%	
<b>Developer's Return for risk / profit (% of value)</b>		<b>0%</b>

<b>COMMUNITY-USE CALCULATIONS</b>				
<b>Values</b>				
Net sq m	796			
Rent (£ psm)	£69	£55,000		
Yield (%)	7.86%	£700,000		
Purchaser's costs (%)	0.00%	£0		
<b>Capital value realisable (less purchaser's costs)</b>				<b>£700,000</b>
Timing of Letting / Sale (month)	26			
<b>Building Costs</b>				
Gross sq m	849			
Community-use Building Costs (£ psm)	-£1,536			-£1,304,417
<b>Total costs</b>				
Building Contingencies (%)	2.91%			-£37,991
<b>Total Building Costs</b>				<b>-£1,342,408</b>
<b>OTHER COSTS</b>				
Community-use - Professional Building Fees	10.00%			-£134,241
50% lump sum	-£67,120			
Regular Payments (per month of build)	-£3,729			
CIL	£0	9.00	£0	
<b>Letting / sale fees</b>				
Letting (% income)	0.00%	£0.00		
Advertising (% of annual income)	0.00%	£0.00		
Sale (% sale price)	0.00%	£0.00		<b>£0</b>
<b>Timings</b>				
Start of Building Period (month)	8			
End of Building Period (month)	26			
Build Period	19			
Build Costs per month	-£70,653			
<b>TOTAL DIRECT Community-use COSTS</b>				<b>-£1,476,649</b>

# APPENDIX B: HOUSING FOR PRIVATE RENT

## 1. FULL OUTPUT

Surplus (Deficit) from Input land valuation at 22/1/2015				-£638,647
HCA DEVELOPMENT APPRAISAL TOOL				
Press for Single Page Summary		SUMMARY		DETAIL
SCHEME				
Site Address	399/401 High Road London N17 6QN		Date of appraisal	22/01/2015
Site Reference			Net Residential Site Area	0.0113
File Source	C:\Data\Excel\data\Other Development\Developme		Author & Organisation	D W Matzdorf, Affordable Housing Consultant
Scheme Description		Registered Provider (whi 0		
Upgrade existing charitable club & offices & construct 17 new flats				

### Housing Mix (Affordable + Open Market)

Total Number of Units	17	units
Total Number of Open Market Units	17	units
Total Number of Affordable Units	0	units
Total Net Internal Area (sq m)	1,243	sq m
% Affordable by Unit	0.0%	
% Affordable by Area	0.0%	
Density	1,504	units/hectare
Total Number of A/H Persons	0	Persons
Total Number of Open Market Persons	0	Persons
Total Number of Persons	0	Persons
Gross site Area	0.01	hectares
Net Site Area	0.01	hectares
Net Internal Housing Area / Hectare	110,000	sq m / hectare

equals 479,084 sqft per acre

Average value (£ per unit)	Open Market Phase 1:	Open Market Phase 2:	Open Market Phase 3:	Open Market Phase 4:	Open Market Phase 5:	Total
1 Bed Flat Low rise	£0	£0	£0	£0	£0	£0
2 Bed Flat Low rise	£0	£0	£0	£0	£0	£0
3 Bed Flat Low rise	£0	£0	£0	£0	£0	£0
4 Bed + Flat Low rise	£0	£0	£0	£0	£0	£0
1 Bed Flat High rise	£0	£0	£0	£0	£0	£0
2 Bed Flat High rise	£0	£0	£0	£0	£0	£0
3 Bed Flat High rise	£0	£0	£0	£0	£0	£0
4 Bed + Flat High rise	£0	£0	£0	£0	£0	£0
2 Bed House	£0	£0	£0	£0	£0	£0
3 Bed House	£0	£0	£0	£0	£0	£0
4 Bed + House	£0	£0	£0	£0	£0	£0
Total Revenue	£0	£0	£0	£0	£0	£0
Net Area (sq m)	-	-	-	-	-	0
Revenue (£ / sq m)	-	-	-	-	-	-

### CAPITAL VALUE OF OPEN MARKET SALES

£0

#### Capital Value of Private Rental

Phase 1	£3,787,084
Phase 2	£0
Phase 3	£0
Phase 4	£0
Phase 5	£0
Total PR	£3,787,084

#### CAPITAL VALUE OF OPEN MARKET HOUSING

BUILD COST OF OPEN MARKET HOUSING inc Contingency	£2,177,880	£ 1,451 psqm	£3,787,084	£ 2,523 psqm
CONTRIBUTION TO SCHEME COSTS FROM OPEN MARKET HOUSING			£1,609,205	

#### AH Residential Values

##### AH & RENTAL VALUES BASED ON NET RENTS

Type of Unit	Social Rented	Shared Ownership (all phases)	Affordable Rent (all phases)	Total
1 Bed Flat Low rise				
2 Bed Flat Low rise				
3 Bed Flat Low rise				
4 Bed + Flat Low rise				
1 Bed Flat High rise				
2 Bed Flat High rise				
3 Bed Flat High rise				
4 Bed + Flat High rise				
2 Bed House				
3 Bed House				
4 Bed + House				
	£0	£0	£0	£0

£ psqm of CV (phase 1)

#### CAPITAL VALUE OF ALL AFFORDABLE HOUSING (EXCLUDING OTHER FUNDING)

RP Cross Subsidy (use of own assets)	£0
LA s106 committed in lieu	£0
RP Re-cycled SHG	£0
Use of AR rent conversion income	£0
Other source of AH funding	£0

#### OTHER SOURCES OF AFFORDABLE HOUSING FUNDING

£0

#### CAPITAL VALUE OF ALL AFFORDABLE HOUSING (INCLUDING OTHER FUNDING)

£0

#### BUILD COST OF AFFORDABLE HOUSING inc Contingency

£0 #DIV/0!

#### CONTRIBUTION TO SCHEME COSTS FROM AFFORDABLE HOUSING

£0



### Car Parking

No. of Spaces	Price per Space (£)	Value
10	-	£0

Value of Residential Car Parking		£0
Car Parking Build Costs	£18,750	

### Ground rent

	Capitalised annual ground rent	
Social Rented	£0	
Shared Ownership	£0	
Affordable Rent	£0	
Open market (all phases)	£65,385	
<b>Capitalised Annual Ground Rents</b>		<b>£65,385</b>

<b>TOTAL CAPITAL VALUE OF RESIDENTIAL SCHEME</b>		<b>£3,852,469</b>
<b>TOTAL BUILD COST OF RESIDENTIAL SCHEME</b>	<b>£2,196,630</b>	
<b>TOTAL CONTRIBUTION OF RESIDENTIAL SCHEME</b>		<b>£1,655,839</b>

### Non-Residential

	Cost	Values
Office	£0	£0
Retail	£0	£0
Industrial	£0	£0
Leisure	£0	£0
Community Use	£1,476,649	£700,000
Community Infrastructure Levy	£0	

<b>CAPITAL VALUE OF NON-RESIDENTIAL SCHEME</b>		<b>£700,000</b>
<b>COSTS OF NON-RESIDENTIAL SCHEME</b>	<b>£1,476,649</b>	
<b>CONTRIBUTION TO SCHEME COSTS FROM NON-RESIDENTIAL</b>		<b>-£776,649</b>

<b>GROSS DEVELOPMENT VALUE OF SCHEME</b>		<b>£4,552,469</b>
<b>TOTAL BUILD COSTS</b>	<b>£3,673,279</b>	
<b>TOTAL CONTRIBUTION TO SCHEME COSTS</b>		<b>£879,190</b>

### External Works & Infrastructure Costs (£)

		Per unit
Site Preparation/Demolition	£33,500	1,971
Roads and Sewers	£0	
Services (Power, Water, Gas, Telco and IT)	£55,000	3,235
Strategic Landscaping	£10,000	588
Off Site Works	£0	
Public Open Space	£0	
Site Specific Sustainability Initiatives	£0	
Plot specific external works	£11,250	662
Other 1	£0	
Other 2	£0	
<b>£109,750</b>		

### Other site costs

Fees and certification	10.0%	£213,462	12,557
Other Acquisition Costs (£)		£0	

### Site Abnormals (£)

De-canting tenants	£0	
Decontamination	£0	
Other	£140,534	8,267
Other 2	£0	
Other 3	£0	
Other 4	£0	
Other 5	£0	
<b>£140,534</b>		

<b>Total Site Costs inc Fees</b>	<b>£463,746</b>	<b>27,279</b>
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### Statutory 106 Costs (£)

Education	£0	
Sport & Recreation	£0	
Social Infrastructure	£0	
Public Realm	£0	
Affordable Housing	£0	
Transport	£0	
Highway	£0	
Health	£0	
Public Art	£0	
Flood work	£0	
Community Infrastructure Levy	£71,816	4,224
Other Tariff	£0	
Other 1	£0	
Other 2	£0	
Other 3	£0	
Other 4	£0	

<b>Statutory 106 costs</b>	<b>£71,816</b>	<b>4,224</b>
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<b>Marketing (Open Market Housing ONLY)</b>			
Sales/letting Fees	2.0%	£14,480	per OM unit 852
Legal Fees (per Open Market unit):	£1,000	£0	
<b>Marketing (Affordable Housing)</b>			
Developer cost of sale to RP (£)		£0	per affordable unit
RP purchase costs (£)		£0	
Intermediate Housing Sales and Marketing (£)		£0	
<b>Total Marketing Costs</b>		<b>£14,480</b>	
<b>Total Direct Costs</b>		<b>£4,223,321</b>	
<b>Finance and acquisition costs</b>			
Land Payment		£700,000	41,176 per OM home 61,946,903 per hectare
Arrangement Fee		£51,426	17.4% of interest
Misc Fees (Surveyors etc)		£0	0.00% of scheme value
Agents Fees		£0	
Legal Fees		£0	
Stamp Duty		£0	
Total Interest Paid		£296,291	
<b>Total Finance and Acquisition Costs</b>		<b>£1,047,717</b>	
<b>Developer's return for risk and profit</b>			
<b>Residential</b>			
Market Housing Return (inc OH) on Valt	17.0%	£0	per OM unit
Affordable Housing Return on Cost	12.0%	£0	per affordable unit
Return on sale of Private Rent	0.0%	£0	0 per PR unit
<b>Non-residential</b>			
Office	£0		
Retail	£0		
Industrial	£0		
Leisure	£0		
Community-use	£0	£0	
<b>Total Operating Profit</b>		<b>£0</b>	
(i.e. profit after deducting sales and site specific finance costs but before deducting developer overheads and taxation)			
<b>TOTAL COST</b>		<b>£5,271,038</b>	
<b>Surplus/(Deficit) at completion 1/7/2017</b>			<b>(£718,569)</b>
<b>Present Value of Surplus (Deficit) at 22/1/2015</b>			<b>(£638,647)</b>
<b>Scheme Investment IRR</b>			
	<b>4.7%</b>	(before Developer's returns and interest to avoid double counting returns)	
Site Value as a Percentage of Total Scheme Value	15.4%	Peak Cash Requirement	-£5,019,543
Site Value per hectare	-£63,590,154 per hectare	-£25,734,583 per acre	

## 2. SUPPORTING REPORTS

### A. Site details

HCA Development Appraisal Tool  
INPUT SHEET 1 - SITE DETAILS

Basic Site Details

#### FULL VIABILITY ASSESSMENT

Site Address	399/401 High Road London N17 6QN
OS X coordinate	
OS Y coordinate	
Site Reference	
File Source	C:\Data\Exceldata\Other Development\Development Appraisal Tool\High Rd 399
Scheme Description	Upgrade existing charitable club & offices & construct 17 new flats
Date of appraisal	22/01/2015
Gross Site Area (hectares)	0.01
Net Residential Site Area (hectares)	0.01
Author & Organisation	D W Matzdorf, Affordable Housing Consultant
Local Planning Authority	Haringey
Land Purchase Price	-
Land Purchase date	01/01/1929
Most recent valuation of the site £	700,000
Basis of valuation	Existing Use
Date of valuation	04/03/2015
Any note on valuation	
Developer of sale units	Ordan UK Ltd
Developer of affordable units	Other
Manager of affordable units	TBA
Registered Provider (where applicable)	
Note on applicant (eg sub partner status)	No affordable housing partner
Area	London

Site Payment is to be 'upfront'

### B. Residential phasing

HCA Development Appraisal Tool  
INPUT SHEET 3 - PHASING

Date of scheme appraisal	22-Jan-15	from Site Sheet	Month number	0	
Use any valid Excel Date format (eg DDMMYY)					
			Construction Start Month no.	Construction End Month no.	No. of units in tenure
Build Period	Construction Start Date	Construction End Date			
Tenure phases display for date input only after transfer from Input 2 sheet					
Private Rental 1 Phase 1	01-Oct-15	01-Apr-17	8	26	17
			Start Month	End Month	No. of units in tenure
RP Purchase from Developer	Purchase start date	Purchase end date			
AH phases display for date input only after transfer from Input 2 sheet					
			Start Month	End Month	No. of units in tenure
Open Market Sale	Sale Start Date	Sale End Date			
OMphases display for date input only after transfer from Input 2 sheet					
			Start Month	End Month	No. of
Private Rental Units	First Rental Start Date	Final Rental Start Date			
PR phases display for date input only after transfer from Input 2 sheet					
Private Rental 1Phase 1	01-May-17	01-Jul-17	27	29	17
			27		
First Ground rent payment	Start Date	Month			
	01-May-17	27			250

### C. Residential details and running costs

Free text Description	No. of units	m2	Property type	Tenure/phase	Sales Valuation £	Weekly Rent Chargeable
1	1	99	2 Bed Flat Low rise	Private Rent Build phase 1	300,000	317.31
2	1	96	2 Bed Flat Low rise	Private Rent Build phase 1	290,000	317.31
3	1	61	2 Bed Flat Low rise	Private Rent Build phase 1	220,000	317.31
4	1	36	1 Bed Flat Low rise	Private Rent Build phase 1	145,000	253.85
5	1	61	2 Bed Flat Low rise	Private Rent Build phase 1	230,000	317.31
6	1	60	2 Bed Flat Low rise	Private Rent Build phase 1	225,000	317.31
7	1	96	4 Bed + Flat Low rise	Private Rent Build phase 1	310,000	438.46
8	1	70	2 Bed Flat Low rise	Private Rent Build phase 1	260,000	317.31
9	1	82	2 Bed Flat Low rise	Private Rent Build phase 1	300,000	317.31
10	1	55	1 Bed Flat Low rise	Private Rent Build phase 1	220,000	253.85
11	1	96	4 Bed + Flat Low rise	Private Rent Build phase 1	315,000	438.46
12	1	70	2 Bed Flat Low rise	Private Rent Build phase 1	260,000	317.31
13	1	78	2 Bed Flat Low rise	Private Rent Build phase 1	280,000	317.31
14	1	78	3 Bed Flat Low rise	Private Rent Build phase 1	290,000	369.23
15	1	75	2 Bed Flat Low rise	Private Rent Build phase 1	265,000	317.31
16	1	85	3 Bed Flat Low rise	Private Rent Build phase 1	310,000	369.23
17	1	47	1 Bed Flat Low rise	Private Rent Build phase 1	195,000	253.85

Annual Costs %	Manage ment %	Void & Bad Debt%	R&M inc sink Fund%	Net Yield %	Initial tranche sold %	Rent % unsold equity	Affordable % Market
Social Rented	12.0%	4.00%	1.00%	5.00%			
Shared Ownership	5.00%	2.00%		5.00%	35.00%	2.75%	
Affordable Rent	10.00%	4.00%	1.00%	5.00%			80%
Private Rent	10.0%	4.00%	1.00%	6.50%			

### D. Community Infrastructure Levy calculation

COMMUNITY INFRASTRUCTURE LEVY	Existing	Proposed	Increase (m²)	Local Authority		Local Mayoral	
				CIL/m²	CIL/m²	CIL	CIL
GIA (affordable)	0 m²	0 m²	0 m²	0	0	0	0
GIA (private)	0 m²	1,501 m²	1,501 m²	15	35	22,518	52,542
GIA (residential)	0 m²	1,501 m²	1,501 m²				
GIA (hall & clubhouse)	642 m²	543 m²	-99 m²	0	35	0	-3,451
GIA (office)	300 m²	306 m²	6 m²	0	35	0	206
GIA (total)	942 m²	2,350 m²	1,409 m²			22,518	49,298
LOCAL AUTHORITY CIL	22,518						
MAYORAL CIL	49,298						
TOTAL CIL	71,816						
PRIVATE RESIDENTIAL M² (GROSS)	1,501						
TOTAL CIL/PRIVATE RESIDENTIAL M² (GROSS)	48						

## E. Residential costs

Tenure phases display for Build Cost		Building Cost £ per Sq m GROSS area	Net to Gross Adjustment	Maximum height in floors (flats only)	Memo-Number of units	Avg Cost pu	Average unit size	Gross Area (sq m)	Build Cost to per Sq m
Shared Ownership phase 1	Low rise flats	1,409	17%	4	0	0	0.0	0	1,409
Affordable Rent phase 1	Low rise flats	1,409	17%	4	0	0	0.0	0	1,409
Open Market Phase 1:	Low rise flats	1,409	17%	4	0	0	0.0	0	1,409
Private Rental 1	Low rise flats	1,409	17%	4	17	103,056	73.1	1,501	1,409

Fees & Contingencies as % of Building Costs		%	£ Total
Design and Professional Fees % (Architects, QS, Project Management)		10.00%	213,462
Residential Building Contingencies (% of Building Costs)		2.93%	62,009

\* This section excludes Affordable Housing section 106 payments. All dates must be between 22-Jan-15 and 17-Jan-35. *Historic costs incurred earlier may be entered as 22-Jan-15 PROVIDED they are not taken into account in the site valuation (& hence double counted)*

External Works & Infrastructure Costs (£)	Comment on nature of issue	Cost (£)	Payment Start Date	Payment end date	Month of Payment Start	Month of Payment End	Cost per unit (all tenures)
Phase 1							
Site Preparation/Demolition		£33,500	01-Oct-15	01-Nov-15	8	9	1,971
Roads and Sewers		£0					
Services (Power, Water, Gas, Telco and IT)		£55,000	01-Mar-16	01-May-16	13	15	3,235
Strategic Landscaping		£10,000	01-Oct-16	01-Dec-16	20	22	588
Off Site Works		£0					
Public Open Space		£0					
Site Specific Sustainability Initiatives		£0					
Plot specific external works		£11,250	01-Oct-16	01-Dec-16	20	22	662
Other 1		£0					
Other 2		£0					

Site Abnormals (£)	Comment on nature of issue	Cost (£)	Payment Start Date	Payment end date	Month of Payment Start	Month of Payment End	Cost per unit (all tenures)
De-canting tenants							
Decoratation							
Other	Listed building repairs	£140,534	01-Dec-15	01-Jun-16	10	16	8,267
Other 2							
Other 3							
Other 4							
Other 5							

Building Costs (£ / car parking space)	Payment Date	Month of Payment
Residential Car Parking Building Costs (average cost / car parking space)	01-Feb-17	24
Total number of residential car parking spaces	(Open Market and Affordable)	

Note: Car park sales revenue can be entered using EAT style input sheet "Summary"

Statutory Payments (£)	Additional information	Cost (£)	Payment start date	Payment end date	Month of Payment Start	Month of Payment End	Per Private Unit	Total Value	Per Net Hectare
Education									
Sport & Recreation									
Social Infrastructure									
Public Realm									
Affordable Housing									
Transport									
Highway									
Health									
Public Art									
Flood work									
Community Infrastructure Levy	per sq metre	£48	01-Nov-15	01-Dec-15	9	10	4,224	71,816	4,234
Other Tariff	per sq metre								
Other 1									
Other 2									
Other 3									
Other 4									

### OTHER COSTS

SITE PURCHASE COSTS	%	£
Agents Fees (% of site cost)	2.00%	-
Legal Fees (% of site cost)	1.50%	-
Stamp Duty (% of site cost)	4.00%	-

Other Acquisition Costs (£)	Comment on nature of issue	Cost (£)	Payment start date	Payment end date	Month of Payment Start	Month of Payment End

### FINANCE COSTS

Arrangement Fee (£)	£51,426
Interest Rate (%)	5.00%
Misc Fees - Surveyors etc (£)	£0
Credit balance reinvestment %	6.00%

### MARKETING COSTS

Affordable Housing Marketing Costs

	Cost (£)	Payment start date	Payment end date	Month of Payment Start	Month of Payment End
Developer cost of sale to RP (£)	£0	01-Feb-17	01-May-17	24	27
RP purchase costs (£)	£0	01-Feb-17	01-May-17	24	27
Intermediate Housing Sales and Marketing (£)	£0	01-Feb-17	01-May-17	24	27

Open Market Housing Marketing Costs

		£ Total
Sales Fees (agents fees & marketing fees) - %	2.00%	-
Legal Fees (per Open Market unit) - £	£1,000	-
Agents Private Rental Initial Letting fees - %	5.00%	14,480

### DEVELOPER'S OVERHEAD AND RETURN FOR RISK (before taxation)

Developer O/head (£)		Return at Scheme end

Open Market Housing (% GDV)	17.00%	17.0%	inc Overheads per open market home
Private Rental (% Cost)	0.00%	0	
Affordable Housing (% Cost)	12.00%		



## F. Non-residential costs

<b>Community Use</b>		
Comments here		
Area of Community Use scheme (gross sq m)	849	
Area of Community Use scheme (net lettable sq m)	796	
<b>Values</b>		
Rent (£ psm pa)		69
Investor's Yield (%)	7.86%	
Costs of Sale (% of value)	0.00%	
<b>Building Costs</b>		
Community Use Building Costs (Gross, £ psm)		1,536
Community Use Building Professional Fees (% of building costs)	10.00%	
Building Contingencies (% of building costs)	2.91%	
CIL rate applicable (£ per m2 GIA)		-
<b>Phasing</b>		<b>Date</b>
Start of Building Period		01/10/2015
End of Building Period		01/04/2017
Timing of Letting / Sale		01/04/2017
Timing of CIL payment		01/11/2015
<b>Letting / sale fees</b>		
Letting (% of income)	0.00%	
Advertising (% of annual income)	0.00%	
Sale (% of sale price)	0.00%	
<b>Developer's Return for risk / profit (% of value)</b>		<b>0%</b>

<b>COMMUNITY-USE CALCULATIONS</b>				
<b>Values</b>				
Net sq m	796			
Rent (£ psm)	£69	£55,000		
Yield (%)	7.86%	£700,000		
Purchaser's costs (%)	0.00%	£0		
<b>Capital value realisable (less purchaser's costs)</b>				<b>£700,000</b>
Timing of Letting / Sale (month)	26			
<b>Building Costs</b>				
Gross sq m	849			
Community-use Building Costs (£ psm)	-£1,536			-£1,304,417
<b>Total costs</b>				
Building Contingencies (%)	2.91%			-£37,991
<b>Total Building Costs</b>				<b>-£1,342,408</b>
<b>OTHER COSTS</b>				
Community-use - Professional Building Fees	10.00%			-£134,241
50% lump sum	-£67,120			
Regular Payments (per month of build)	-£3,729			
CIL	£0	9.00	£0	
<b>Letting / sale fees</b>				
Letting (% income)	0.00%	£0.00		
Advertising (% of annual income)	0.00%	£0.00		
Sale (% sale price)	0.00%	£0.00		<b>£0</b>
<b>Timings</b>				
Start of Building Period (month)	8			
End of Building Period (month)	26			
Build Period	19			
Build Costs per month	-£70,653			
<b>TOTAL DIRECT Community-use COSTS</b>				<b>-£1,476,649</b>

Consultancy '31'																	
Construction Costing																	
Outline Cost Budget																	
Proposed redevelopment																	
399 Tottenham High Road N17 6QN																	
										Floor area (m²)		Cost					
										Residential	Chances	Residential	Chances				
Demolition & Enabling																	
Existing building Demolition																	
Hull & Roofs etc to existing Building		£	Item	£	28,500.00												
Scaffold		4,500.00															
Services		2,500.00															
Strip out		2,500.00															
Main demolition		12,500.00															
Cart materials		7,500.00															
£		28,500.00															
Site clearance		Item		£	5,000.00												
										Demolition & Enabling		£	33,500.00	1,501.20	849.00	21,398.26	12,101.74
Basement construction																	
Assume - conting piles		Item		£	265,820.00												
Areas																	
Hall	284.70	Mobile	5,000.00														
WC	33.10	Pile mat	7,500.00														
St	22.20	780 Piles	182,000.00														
Cyc	18.00	Clear spoil	43,320.00														
St	8.00	Machine etc	5,000.00														
Car	67.00	Cut down piles	4,200.00														
	3.80	550m in pile cap beam	19,000.00														
	1645.40	£	265,820.00														
Bulk Excavate		1645.40	cub m	£	95.00	£	156,313.00										
Basement floor - Assume WP concrete		433.00	sqm	£	219.50	£	95,043.50										
Clayboard ?		20.00															
Assume - 350mm RC slab - WP concrete		144.50															
Insulation & screed		55.00															
£		219.50															
Perim walls - Assume WP concrete		342.00	sqm	£	282.50	£	96,615.00										
Assume 250mm RC wall - WP concrete		117.50															
Shutter		65.00															
Insulation & lining system		100.00															
£		282.50															
Lid		433.00	sqm	£	320.00	£	138,560.00										
Assume 250mm RC slab		100.00															
Shutter		65.00															
Insulation & screed		100.00															
Ceiling & paint		55.00															
£		320.00															
Tanking & drainage						£	48,000.00										
Delta - 775sqm		31,000.00															
Sump & pumps		10,000.00															
Drain connections		5,000.00															
Electrics		2,000.00															
£		48,000.00															
										Basement construction		£	800,351.50	164.10	317.80	182,022.45	618,329.05
										433.00	sqm	£	1,848.39	Per sqm			
Upper floors - frame & structure																	
Assume concrete + plaster ceilings		937.49	sqm	£	310.00	£	290,620.35										
Assume 250mm RC slab		100.00															
Shutter		65.00															
Insulation & screed		100.00															
Ceiling & paint		45.00															
£		310.00															
Existing floors & ceilings		693.00	sqm	£	48.00	£	33,264.00										
Allow for work to extg floors (incl struct work ??)		25.00															
Assume part re-plaster soffits after alterations		15.00															
Decorate		8.00															
£		48.00															
										Upper floors - frame & structure		£	323,884.35	323,884.35			

399 Tottenham High Road N17 6QN										Residential	Chances	Residential	Chances		
External walls															
35.00		Assume - cavity face brick walls	1148.50	sqm	£	193.00	£	221,660.50							
10.00	350.00	Measured over openings	£												
28.00		Facework - Assume £600 / 1000 facings	100.00												
3.60	100.80	Cavity & Insulate	22.00												
-13.20		Blockwork	36.00												
-13.50	178.20	Plaster & paint	35.00												
2/	-8.50		£	189.00											
11.50	-80.50														
	1148.50														
									External walls	£	221,660.50	1,501.20	849.00	141,586.56	80,073.94
Roof															
20.75		Assume joisted + plaster ceiling + Seedum	356.00	sqm	£	290.00	£	103,240.00							
15.00	311.25		£												
10.30		Assume joisted struct	65.00												
4.30	-44.29	Deck & roofing	125.00												
	855.54	Insulation	45.00												
		Ceiling & paint	55.00												
		£	290.00												
				Perimeter											
			78.00	linm	£	100.00	£	7,800.00							
				£											
				Upstands, copings, flashings											
18.30															
20.75	379.73														
78.10															
2.90	226.49	Slate mansards, dormers	606.00	sqm	£	235.00	£	142,410.00							
	606.22		£												
				Assume joisted struct											
		Slate	80.00												
		Insulation	45.00												
		ceiling & paint	45.00												
		£	235.00												
				Lift motor room				£	6,000.00						
5.00															
5.00	25.00	Low level roofs	39.00	sqm	£	225.00	£	8,775.00							
3.75															
3.75	14.06														
	39.06														
				Rainwater				£	8,000.00						
				North elevation balconies											
			2.00	No	£	950.00	£	1,900.00							
				Escape stair				£	4,000.00						
									Roof	£	282,125.00	1,501.20	849.00	180,208.51	101,916.49
Internal walls & Doors															
			Struct												
			380.00	sqm	£	120.00	£	45,600.00			90.00%	10.00%	41,040.00	4,560.00	
			£												
			Assume - Blockwork												
			Plaster & paint both sides												
			£												
			Partitions												
			1200.00	sqm	£	106.00	£	127,200.00			90.00%	10.00%	114,480.00	12,720.00	
			£												
			Stud frame												
			30.00												
			Insulation												
			Plasterboard & paint both sides												
			£												
27.00															
25.00		Doors	120.00	No	£	575.00	£	69,000.00			108.00	12.00	62,100.00	6,900.00	
26.00			£												
21.00		Standard Living & architrave	125.00												
21.00	120.00	Standard flush door	200.00												
			Ironmongery												
			Decoration												
			£												
									Internal walls & Doors	£	241,800.00				
Stairs															
				Main				£	27,000.00				27,000.00		
				Chances				£	18,000.00					18,000.00	
									Stairs	£	45,000.00				



22





## APPENDIX D: SCHEDULE OF ACCOMMODATION

<b>399/401 HIGH RD N17 6QN</b>											
<b>SCHEDULE OF ACCOMMODATION - PROPOSED &amp; EXISTING</b>											
04/03/2015 17:01											
<b>Proposed scheme</b>	<b>Storey</b>	<b>Area (m²)</b>	<b>Area (ft²)</b>	<b>Bedrooms</b>	<b>Hab. Rooms</b>	<b>Persons</b>	<b>OMV</b>	<b>OMV/ft²</b>	<b>Rent/month</b>	<b>Rent/week</b>	<b>Yield</b>
<b>Residential units</b>											
1	-1	98.9	1,065	2	3	4	300,000	282	1,375	317.31	5.50%
2	-1	96.3	1,037	2	3	3	290,000	280	1,375	317.31	5.69%
3	0	60.5	651	2	3	3	220,000	338	1,375	317.31	7.50%
4	0	36.4	392	1	2	1	145,000	370	1,100	253.85	9.10%
5	0	61.4	661	2	3	3	230,000	348	1,375	317.31	7.17%
6	0	59.9	645	2	3	3	225,000	349	1,375	317.31	7.33%
7	1	95.7	1,030	4	5	5	310,000	301	1,900	438.46	7.35%
8	1	69.8	751	2	3	4	260,000	346	1,375	317.31	6.35%
9	1	82.1	884	2	3	4	300,000	339	1,375	317.31	5.50%
10	2	54.7	589	1	2	2	220,000	374	1,100	253.85	6.00%
11	2	96.1	1,034	4	5	5	315,000	305	1,900	438.46	7.24%
12	2	69.8	751	2	3	4	260,000	346	1,375	317.31	6.35%
13	2	77.7	836	2	3	4	280,000	335	1,375	317.31	5.89%
14	3	77.6	835	3	4	4	290,000	347	1,600	369.23	6.62%
15	3	74.7	804	2	3	4	265,000	330	1,375	317.31	6.23%
16	3	84.5	910	3	4	4	310,000	341	1,600	369.23	6.19%
17	3	46.9	505	1	2	2	195,000	386	1,100	253.85	6.77%
<b>NET RESIDENTIAL</b>		<b>1,243.0</b>	<b>13,380</b>	<b>37</b>	<b>54</b>	<b>59</b>	<b>4,415,000</b>	<b>330.0</b>	<b>24,050</b>	<b>5,550.03</b>	<b>6.54%</b>
<b>Ancillary spaces</b>											
Refuse & cycle stores	-1	40.2	433				0				
Residential circulation		218.0	2,347				0				
<b>GROSS RESIDENTIAL</b>		<b>1,501.2</b>	<b>16,159</b>	<b>37</b>	<b>54</b>	<b>59</b>	<b>4,415,000</b>	<b>273.2</b>	<b>24,050</b>	<b>5,550.03</b>	<b>6.54%</b>
<b>Non-residential spaces</b>											
Chances	-1	284.7	3,065				0				
Chances (WC & Store)	-1	41.1	442				0				
Chances (circulation)	-1	12.0	129				0				
Chances	0	205.2	2,209				500,000	86	2,917	192.31	7.00%
Chances offices	1	184.5	1,986				200,000	61	1,250	192.31	7.50%
Chances offices	2	121.5	1,308				0				
<b>GROSS NON-RESIDENTIAL</b>		<b>849.0</b>	<b>9,139</b>			<b>0</b>	<b>700,000</b>	<b>77</b>	<b>4,167</b>	<b>384.62</b>	<b>7.14%</b>
<b>GRAND TOTALS</b>		<b>2,350.2</b>	<b>25,298</b>	<b>37</b>	<b>54</b>	<b>59</b>	<b>5,115,000</b>	<b>202</b>	<b>28,217</b>	<b>5,934.65</b>	<b>6.62%</b>
<b>Existing building</b>											
Chances	-1	148.5	1,598				0				
Chances	0	493.1	5,308				525,000	76			
Offices	1	184.5	1,986				175,000	54			
Offices	2	115.6	1,244				0				
<b>TOTALS</b>		<b>941.7</b>	<b>10,137</b>				<b>700,000</b>	<b>69.1</b>			

**Consultation Documents Produced for Planning Application Reference HGY/2015/0774**

**399-401 High Road N17 6QN**

Tottenham CAAC Joyce Rosser 46 Redston Road London N8 7HJ

LBH Conservation Officer Conservation Officer 6th Floor, 225 High Road (Policy) London N22 8HQ

Tottenham Civic Society PO Box 25687 London N17 6FW

(R) Bruce Grove Residents Network Pat Ayinde 36 Strode Road London N17

English Heritage - London Region No.1 Waterhouse Square London EC1N 2ST 138-142 Holborn

(01) Robbie McNaugher

**Total Letters: 8**



Robbie McNaugher  
London Borough of Haringey  
Civic Centre,  
High Road  
Wood Green  
N22 8LE

Your Ref: HGY/2015/0773

Our Ref: CLO16295

Contact: John Gould  
Direct Dial: 020 7973 3740  
Email: [john.gould@HistoricEngland.org.uk](mailto:john.gould@HistoricEngland.org.uk)

31 March 2015

Dear Mr McNaugher

**TOWN & COUNTRY PLANNING ACT 1990 (AS AMENDED)  
NATIONAL PLANNING POLICY FRAMEWORK 2012**

**399-401 High Road**

*Refurbishment of existing premises and roof extension and extension at rear to provide 17 flats.*

**Recommend Archaeological Condition(s)**

Thank you for your consultation received on 24 March 2015.

The Greater London Archaeological Advisory Service (GLAAS) provides archaeological advice to boroughs in accordance with the National Planning Policy Framework and GLAAS Charter.

The above planning either affects a heritage asset of archaeological interest or lies in an area where such assets are expected.

The National Planning Policy Framework (Section 12) and the London Plan (2011 Policy 7.8) emphasise that the conservation of archaeological interest is a material consideration in the planning process. Paragraph 128 of the NPPF says that applicants should submit desk-based assessments, and where appropriate undertake field evaluation, to describe the significance of heritage assets and how they would be affected by the proposed development. This information should be supplied to inform the planning decision. If planning consent is granted paragraph 141 of the NPPF says that applicants should be required to record and advance



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Telephone 020 7973 3000 Facsimile 020 7973 3001  
[www.HistoricEngland.org.uk](http://www.HistoricEngland.org.uk)

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understanding of the significance of any heritage assets to be lost (wholly or in part) and to make this evidence publicly available.

The proposed development site is located within the Tottenham Archaeological Priority Area and therefore it is possible that significant archaeological remains may be preserved below ground and impacted by the development. In particular archaeological remains of medieval and early post-medieval Tottenham may survive.

Appraisal of this application using the Greater London Historic Environment Record and information submitted with the application indicates the need for field evaluation to determine appropriate mitigation. However, although the NPPF envisages evaluation being undertaken prior to determination, in this case consideration of the nature of the development, the archaeological interest and/or practical constraints are such that I consider a condition could provide an acceptable safeguard. A condition is therefore recommended to require a two-stage process of archaeological investigation comprising: first, evaluation to clarify the nature and extent of surviving remains, followed, if necessary, by a full investigation. The archaeological interest should therefore be conserved by attaching a condition as follows:

Reason	Heritage assets of archaeological interest may survive on the site. The planning authority wishes to secure the provision of appropriate archaeological investigation, including the publication of results, in accordance with Section 12 of the NPPF
Condition	<p>A) No development other than demolition to existing ground level shall take place until the applicant (or their heirs and successors in title) has secured the implementation of a programme of archaeological evaluation in accordance with a written scheme which has been submitted by the applicant and approved by the local planning authority in writing and a report on that evaluation has been submitted to the local planning authority.</p> <p>B) If heritage assets of archaeological interest are identified by the evaluation under Part A, then before development, other than demolition to existing ground level, commences the applicant (or their heirs and successors in title) shall secured the implementation of a programme of archaeological investigation in accordance with a Written Scheme of Investigation which has been submitted by the applicant and approved by the local planning authority in writing.</p> <p>C) No development or demolition shall take place other than in accordance with the Written Scheme of Investigation approved under Part (B).</p> <p>D) The development shall not be occupied until the site investigation and post investigation assessment has been completed in accordance with the programme set out in the Written Scheme of Investigation approved under Part (B), and the provision for analysis, publication and dissemination of the results and archive deposition has been secured.</p>
Informative	Written schemes of investigation will need to be prepared and implemented by a suitably qualified archaeological practice in accordance with Historic



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England Greater London Archaeology guidelines. They must be approved by the planning authority before any on-site development related activity occurs.

It is recommended that the archaeological fieldwork should comprise of the following:

### Evaluation

An archaeological field evaluation involves exploratory fieldwork to determine if significant remains are present on a site and if so to define their character, extent, quality and preservation. Field evaluation may involve one or more techniques depending on the nature of the site and its archaeological potential. It will normally include excavation of trial trenches. A field evaluation report will usually be used to inform a planning decision (pre-determination evaluation) but can also be required by condition to refine a mitigation strategy after permission has been granted.

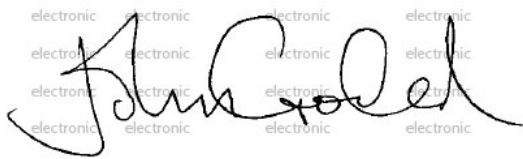
### Excavation

Archaeological excavation is a structured investigation with defined research objectives which normally takes place as a condition of planning permission. It will involve the investigation and recording of an area of archaeological interest including the recovery of artefacts and environmental evidence. Once on-site works have been completed a 'post-excavation assessment' will be prepared followed by an appropriate level of further analysis, publication and archiving.

Please do not hesitate to contact me should you require further information or assistance. I would be grateful to be kept informed of the progress of this application.

Please note that this response relates solely to archaeological considerations. If necessary, English Heritage's Development Management or Historic Places teams should be consulted separately regarding statutory matters.

Yours sincerely

A handwritten signature in black ink, appearing to read 'John Gould', is centered on the page. The signature is fluid and cursive.

John Gould

**Archaeology Advisor**

**Greater London Archaeological Advisory Service  
National Planning and Conservation: London**



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LONDON OFFICE

Mr Robbie McNaugher  
London Borough of Haringey  
6th Floor, River Park House  
Wood Green  
London  
N22 8HQ

Direct Dial: 020 7973 3785

Our refs: P00451418  
L00451406

10 April 2015

Dear Mr McNaugher

**Notifications under Circular 01/2001, Circular 08/2009 &  
T&CP (Development Management Procedure) Order 2010  
399-401 HIGH ROAD, TOTTENHAM, LONDON, N17 6QN  
Application Nos. HGY/2015/0774 and HGY/2015/0774**

Thank you for your letter of 25 March 2015 notifying Historic England of the above planning and listed building consent applications.

### Significance

The site of 399-401 High Road is Grade II listed and falls within the Tottenham Green, Tottenham High Road Conservation Area. Though largely reconstructed following fire, the building retains the scale and form of Tottenham's late eighteenth-century development.

Such development took the form of grand terraced houses that would typify later Georgian Tottenham. Along the High Road these buildings are now a rarity, though good examples survive in the Bruce Grove area. These high status structures were the first major indication of the increasingly suburban nature of Tottenham as its role as a leafy satellite of the City increased. The extensive garden plots to front and rear also provide some indication of the genteel quality of the suburb.

### Impact

The proposed works include extensions to the north, the south, the rear, the basement, and at roof level. These works necessitate the demolition of the existing southern extension, the only remaining historic fabric on site.

The scale of extension will create an overcrowding of the significant terraced form, ultimately recasting the building into a new form of development no long discernible for its record of an historic urban grain.

The installation of an external cornice to the parapet and larger windows to the first



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floor of No. 401 will reinstate some features of the historic site that were lost at the time of the reconstruction, though it is not proposed to reinstate the significant former doorcase.

## Policy

The Government's National Planning Policy Framework 2012 (NPPF) includes the conservation of heritage assets as a core principle underpinning sustainable development. Section 12 deals with the conservation and enhancement of the historic environment through such development, and contains policies of relevance to this case.

Paragraph 126 discusses the importance of sustaining and enhancing the significance of heritage assets, as does paragraph 137 which specifically directs that local planning authorities 'should look for opportunities for new development within Conservation Areas to enhance or better reveal their significance'.

## Historic England's Position

Due to the recent reconstruction of 399-401 the principle of extending these buildings to a substantial degree is unlikely to cause harm to the historic environment. However, despite their recent history these buildings do retain significant elements. These primarily include the older surviving extension to the south of No. 399, and the record of high status terraced development along the High Road.

In our view the proper realisation of Paragraph 137 of the NPPF which directs councils to seek opportunities to enhance or better reveal the significance of heritage assets would see the retention of the existing southern extension, and the legibility of the buildings' terraced form enhanced.

The proposals at present would result in the demolition of the existing southern extension, thereby removing any fabric that predated the fire. It would also create broad, high, stepped extensions to the north and south that will make the existing buildings more difficult to distinguish for their terraced form.

We would advise that the existing southern extensions should be retained, and that the proposed northern extension should be redesigned so as to continue the terrace. The continuation of the terrace would allow slightly more development space to be utilised at the north end, and a more confident expression of the Conservation Area's historic development.

While the restitution of historical details such as the cornice and the earlier window configuration may provide an additional opportunity to reveal lost significance, your



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council should satisfy itself that this is not at the expense of design quality. Of the external elements of 399-401 High Rd now lost, the most significant detail was the original doorcase of broken pedimented form.

**Recommendation**

We recommend the proposals undergo further alteration and review with the aim of retaining the south extension and achieving an architectural solution better representative of the historic form of development associated with this site. Your council must be satisfied that an opportunity to better reveal or enhance the significance of the conservation area is realised through this development.

We would welcome the opportunity of advising further. Please consult us again if any additional information or amendments are submitted. If, notwithstanding our advice, you propose to approve the scheme in its present form, please advise us of the date of the committee and send us a copy of your report at the earliest opportunity.

Please note that this response relates to historic building and historic area matters only. If there are any archaeological implications to the proposals it is recommended that you contact the Greater London Archaeological Advisory Service for further advice (Tel: 020 7973 3712).

Yours sincerely

**Matthew Cooper**

Assistant Inspector of Historic Buildings and Areas

E-mail: [matthew.cooper@HistoricEngland.org.uk](mailto:matthew.cooper@HistoricEngland.org.uk)

cc

Ms Nairita Chakraborty, London Borough of Haringey



1 WATERHOUSE SQUARE 138-142 HOLBORN LONDON EC1N 2ST

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L00451406

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Yours sincerely

**Matthew Cooper**

Assistant Inspector of Historic Buildings and Areas

E-mail: [matthew.cooper@HistoricEngland.org.uk](mailto:matthew.cooper@HistoricEngland.org.uk)

cc

Ms Nairita Chakraborty, London Borough of Haringey



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## Cordell Paul

---

**From:** Cooper, Matthew [Matthew.Cooper@HistoricEngland.org.uk]  
**Sent:** 29 April 2015 10:55  
**To:** McNaugher Robbie  
**Cc:** Planning Support; Chakraborty Nairita  
**Subject:** RE: 399-401 High Rd, Tottenham Planning: HGY/2015/0774 LBC: HGY/2015/0774

Dear Mr McNaugher,

Further to my earlier letter I would like to add a correction to the comments I have provided. Having clarified that the existing south extension will be extended upwards but not demolished my original comments require amendment.

This approach in retaining some historic fabric is preferable to the demolition of that area, but the result renders the same impacts as observed to the north. That is, the obscuring of the terraced form. Moreover, the value of the original extension will largely be erased by developing in this fashion as it too will no longer be discernible.

Once again, we would welcome further involvement in the consideration of this scheme and can be contacted via the details below.

Your sincerely,

Matthew

**Matthew Cooper**

Assistant Inspector of Historic Buildings and Areas  
Development Management Team (London - City and East)

Historic England  
1 Waterhouse Square, 138-142 Holborn, London, EC1N 2ST  
Tel: 0207 973 3785  
Email: [Matthew.Cooper@HistoricEngland.org.uk](mailto:Matthew.Cooper@HistoricEngland.org.uk)  
Web: [www.historicengland.org.uk](http://www.historicengland.org.uk)

---

**From:** Cooper, Matthew  
**Sent:** 10 April 2015 14:44  
**To:** 'robbie.mcnaugher@haringey.gov.uk'  
**Cc:** Haringey Planning ([Development.control@haringey.gov.uk](mailto:Development.control@haringey.gov.uk)); Chakraborty Nairita ([Nairita.Chakraborty@haringey.gov.uk](mailto:Nairita.Chakraborty@haringey.gov.uk))  
**Subject:** 399-401 High Rd, Tottenham Planning: HGY/2015/0774 LBC: HGY/2015/0774

Dear Robbie,

**399-401 High Rd, Tottenham Planning: HGY/2015/0774 LBC: HGY/2015/0774**

Please find attached our response to the above applications.

Kind regards,

Matthew

**Matthew Cooper**

Assistant Inspector of Historic Buildings and Areas  
Development Management Team (London - City and East)

Historic England

1 Waterhouse Square, 138-142 Holborn, London, EC1N 2ST

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Web: [www.historicengland.org.uk](http://www.historicengland.org.uk)

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## Argles James

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**From:** Planning Support  
**Subject:** FW: Comment Received from Public Access

Application Reference No. : HGY/2015/0774  
Site Address: 399-401 High Road London N17 6QN  
Comments by: Joyce Rosser  
From:  
46  
Redston Road

N8 7HJ  
Submission: Support  
Comments: Please note that this is a personal response (not on behalf of any of the community groups with which I am connected).  
I support this planning application for two reasons:  
1. It will ensure the continuation of Tottenham Chances and all the work it does (but in improved premises).  
2. I'm quite happy with the proposed design which is clearly a great improvement on the present building. I have shown the illustration to other people and they also like it.

# CONSERVATION COMMENTS

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Application Ref:	HGY/2015/0773
Location:	399-401 High Road
Proposal:	Refurbishment of existing premises and roof extension and extension at rear to provide 17 flats
Officer:	Robbie McNaugher

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**Background:** This is a rebuilt replica of a late 18<sup>th</sup> Century pair of houses. Typical of its architectural style and period, each house is three storeys with basements, in yellow stock brick, gauged brick arches and parapet detail. There were late 19<sup>th</sup> Century extensions to the south as well as the north. Following a fire, the houses were rebuilt in the 1980s, however, the rear part of the southern extension survived and retains its late-nineteenth-century form. To the interior, the first floor room retains decorative cornice details and Victorian fireplace along with a chimneybreast. The extension to the north no longer exists. The building is listed at grade II and the listing description states:

*Late C18 pair now as 1. Each house 3 storeys and basement, 3 windows. 2 storey, 1 window slightly projecting south extension. Stock brick with stone-coped parapet. Gauged near-flat brick arches to sash windows, some with glazing bars, in stucco-lined reveals. At left 8 steps to door of 4 fielded and 1 flat panels, with radial fanlight. Doorcase of Ionic columns with entablatures and open pediment enriched with modillions and dentils. Late C191 storey right extension and further set-back, mid-late c19 left extension.*

The site also falls within the Tottenham Green Conservation Area. The building is well set back from the street frontage. Later use as a Club led to the conversion of the front gardens to parking areas. Nicholas Court, the adjacent development is further set back from the street creating a wide gap in an otherwise tightly developed street scene. The street scene at this location is thus poor and dominated by car parking and tarmac.

The applicant has submitted a Design and Heritage Statement explaining how the proposal would preserve or enhance the character and appearance of the conservation area as per NPPF requirements. I have reviewed these documents and accompanying drawings from a conservation point of view and have considered the impact of the development in accordance with the Council's statutory duty as per Planning (Listed Buildings and Conservation Areas) Act, 1990. There have been extensive pre-application consultations of which I have been part of.



## **COMMENTS:**

### **Assessment of Significance:**

The site's significance lies in its Georgian scale and form that was typical along Tottenham High Road during the 18<sup>th</sup> Century. Whilst largely rebuilt, its appearance is reminiscent of the Tottenham's by gone years when the area was thriving in business with aristocrats and successful business men moving in the area. In terms of historic fabric, however, perhaps the part of the southern extension that survived the fire is perhaps the only remnant of the original building and therefore significant. During the rebuilt the original windows were not replicated and the decorative entrance door case was lost. As such, the main building does not contain any historic features. Any new development should, therefore, preserve the scale and form of the existing building and retain the southern extension.

In terms of the building's contribution to the conservation area, later development of Nicholas Court and the site's conversion to a Club has left a wide opening in an otherwise tightly developed street frontage. This contributes poorly to the conservation area, the street frontage being dominated by car parking and tarmac.

### **Proposed development**

The scheme proposes to convert the existing building to residential flats with a substantial extension to its rear. Additional floors are proposed to the main building and to the retained southern extension along with a three storey extension to the north.

The scheme also proposes to reinstate the original style of the windows now lost along with the entrance door case. The northern extension is designed to appear similar to the southern extension, thus re-establishing symmetry that would have been part of the original Georgian building.

However, the scale of the extensions is such that they render the scale and form of the existing pair illegible including that of the retained southern extension. The extension would have an overbearing impact on the listed building and would not be considered subordinate and ancillary in nature. As such it would cause significant harm to its character and appearance and would be unacceptable.

In terms of design, the proposed extensions are not considered to be of high quality that would enhance the appearance of the listed building or the character and appearance of the conservation area. As such, the proposal neither preserves nor enhances the heritage assets and would be unacceptable.

Whilst there is some heritage benefit with regards to the reinstatement of some of the earlier features, this would not outweigh the substantial harm caused by the scale and overbearing nature of the proposed extensions. The scheme is therefore unacceptable.

**CONCLUSION:**

From a conservation point of view, in context of the recent case on Barnwell Manor, the discharge of duty to ensure that development should preserve or enhance the character of heritage assets has been considered. The proposed scheme, by virtue of its overall size and nature would not preserve or enhance the listed building and would cause significant harm to it. The proposal would also detract from the character and appearance of the conservation area and would again cause substantial harm to it. Whilst the reinstatement of some of the historic features has some heritage benefit, this would not outweigh the substantial harm caused by the proposal, as per the NPPF. As such, the scheme is unacceptable under current legislation and policies.

**Nairita Chakraborty**

**Principal Conservation Officer**

**11<sup>th</sup> May 2015**

# **LIST OF RECOMMENDATIONS UNDER DELEGATED POWERS 11/05/2015**

## **REPORT FOR CONSIDERATION UNDER DELEGATED POWERS**

### **1. APPLICATION DETAILS**

**Reference No:** HGY/2015/0774

**Ward:** Bruce Grove

**Date received:** 20/03/2015

**Last amended date:** NA

**Drawing number of plans:** 311-01 Rev A, 02, 03, 04, 05, 06, 08, 09, 10, 11 Rev O , 12 Rev T, 13 Rev T, 14 Rev T, 15 Rev T, 16 Rev V, 18 Rev R, 19 Rev R, 20 Rev K, 21 Rev H, 22 Rev K, 23 Rev K, 24 Rev L, 25 Rev A, 26 Rev A, 30, 31, 50 & 51 and Statement of Heritage Significance dated 21st January 2015

**Address:** 399-401 High Road N17 6QN

**Proposal:** Listed Building Consent for refurbishment of existing premises and roof extension and extension at rear to provide 17 flats

**Applicant:** Tottenham War Services

**Ownership:** Private

**Site Visit Date:** 07/05/2015

**Officer contact:** Robbie McNaugher

### **2. SUMMARY OF RECOMMENDATION**

**REFUSE CONSENT**

**Reasons for Refusal:**

- 1) Harm to the listed building

### **3. PROPOSED DEVELOPMENT AND LOCATION DETAILS**

#### **3.1 Proposed development**

This is an application for Listed Building Consent for refurbishment of existing premises and roof extension and extension at rear to provide 17 flats.

#### **3.2 Site and Surroundings**

The subject site is located on the western side of the High Road Tottenham. The site contains a Grade II Listed Building which is a rebuilt replica of a late 18th Century pair of houses. Typical of its architectural style and period, each house is three storeys with basements, in yellow stock brick, gauged brick arches and parapet detail. There are late 19th Century extensions to the south as well as the north. Following a fire, the houses were

rebuilt in the 1980s, however, the rear part of the southern extension survived and retains its late-nineteenth-century form. To the interior, the first floor room retains decorative cornice details and Victorian fireplace along with a chimneybreast.

The building is set back approximately 17 metres from the back edge of the pavement with hard standing accommodating car parking to the northern side and front of the building. The site is accessed off the High Road via a crossover to the northern end of the site.

The building currently accommodates community faculties including a music venue.

### 3.3 Relevant Planning and Enforcement history

OLD/1988/0572 - Listed Building consent for fire damaged building structure to match original in appearance and materials - GTD 14-09-1988

OLD/1989/0584 - Use of 1st and 2nd floors as offices - GTD 26-09-1989 OLD/1989/0585 - Use of 1st and 2nd floors as offices - GTD 26-09-1989

OLD/1989/0586 - Listed building consent for conversion of 1st and 2nd floors to offices - GTD 06-09-1989

OLD/1989/0587 - Listed building consent for conversion of 1st and 2nd floors to offices - GTD 06-09-1989

HGY/1996/0829 - Change of use of part of ground floor to a mini-cab office for the Legion cab and courier service - GTD 20-08-96

HGY/1998/0973 - Renewal of temporary planning permission HGY/51427 granted on 20/8/96 for use of part of ground floor to a mini-cab office and courier service - GTD 27-10-98

## 4. CONSULTATION RESPONSE

4.1 The following were consulted regarding the application:

Tottenham CAAC  
LBH Conservation Officer  
Tottenham Civic Society  
Bruce Grove Residents Network  
Historic England (formally English Heritage)

The following responses were received :

Internal:

1) LBH Conservation Officer

**Background:** This is a rebuilt replica of a late 18th Century pair of houses. Typical of its architectural style and period, each house is three storeys with basements, in yellow stock brick, gauged brick arches and parapet detail. There were late 19th Century extensions to the south as well as the north. Following a fire, the houses were rebuilt in the 1980s, however, the rear part of the southern extension survived and retains its late-nineteenth-century form. To the interior, the first floor room retains decorative cornice details and

Victorian fireplace along with a chimneybreast. The extension to the north no longer exists. The building is listed at grade II and the listing description states:

Late C18 pair now as 1. Each house 3 storeys and basement, 3 windows. 2 storey, 1 window slightly projecting south extension. Stock brick with stone-coped parapet. Gauged near-flat brick arches to sash windows, some with glazing bars, in stucco-lined reveals. At left 8 steps to door of 4 fielded and 1 flat panels, with radial fanlight. Doorcase of Ionic columns with entablatures and open pediment enriched with modillions and dentils. Late C191 storey right extension and further set-back, mid-late c19 left extension.

The site also falls within the Tottenham Green Conservation Area. The building is well set back from the street frontage. Later use as a Club led to the conversion of the front gardens to parking areas. Nicholas Court, the adjacent development is further set back from the street creating a wide gap in an otherwise tightly developed street scene. The street scene at this location is thus poor and dominated by car parking and tarmac.

The applicant has submitted a Design and Heritage Statement explaining how the proposal would preserve or enhance the character and appearance of the conservation area as per NPPF requirements. I have reviewed these documents and accompanying drawings from a conservation point of view and have considered the impact of the development in accordance with the Council's statutory duty as per Planning (Listed Buildings and Conservation Areas) Act, 1990. There have been extensive pre-application consultations of which I have been part of.

## **COMMENTS:**

### **Assessment of Significance:**

The site's significance lies in its Georgian scale and form that was typical along Tottenham High Road during the 18th Century. Whilst largely rebuilt, its appearance is reminiscent of the Tottenham's by gone years when the area was thriving in business with aristocrats and successful business men moving in the area. In terms of historic fabric, however, perhaps the part of the southern extension that survived the fire is perhaps the only remnant of the original building and therefore significant. During the rebuilt the original windows were not replicated and the decorative entrance door case was lost. As such, the main building does not contain any historic features. Any new development should, therefore, preserve the scale and form of the existing building and retain the southern extension.

In terms of the building's contribution to the conservation area, later development of Nicholas Court and the site's conversion to a Club has left a wide opening in an otherwise tightly developed street frontage. This contributes poorly to the conservation area, the street frontage being dominated by car parking and tarmac.

### **Proposed development**

The scheme proposes to convert the existing building to residential flats with a substantial extension to its rear. Additional floors are proposed to the main building and to the retained southern extension along with a three storey extension to the north.

The scheme also proposes to reinstate the original style of the windows now lost along with the entrance door case. The northern extension is designed to appear similar to the



southern extension, thus re-establishing symmetry that would have been part of the original Georgian building.

However, the scale of the extensions is such that they render the scale and form of the existing pair illegible including that of the retained southern extension. The extension would have an overbearing impact on the listed building and would not be considered subordinate and ancillary in nature. As such it would cause significant harm to its character and appearance and would be unacceptable.

In terms of design, the proposed extensions are not considered to be of high quality that would enhance the appearance of the listed building or the character and appearance of the conservation area. As such, the proposal neither preserves nor enhances the heritage assets and would be unacceptable.

Whilst there is some heritage benefit with regards to the reinstatement of some of the earlier features, this would not outweigh the substantial harm caused by the scale and overbearing nature of the proposed extensions. The scheme is therefore unacceptable.

## **CONCLUSION:**

From a conservation point of view, in context of the recent case on Barnwell Manor, the discharge of duty to ensure that development should preserve or enhance the character of heritage assets has been considered. The proposed scheme, by virtue of its overall size and nature would not preserve or enhance the listed building and would cause significant harm to it. The proposal would also detract from the character and appearance of the conservation area and would again cause substantial harm to it. Whilst the reinstatement of some of the historic features has some heritage benefit, this would not outweigh the substantial harm caused by the proposal, as per the NPPF. As such, the scheme is unacceptable under current legislation and policies.

External:

2) Historic England

## **Significance**

The site of 399-401 High Road is Grade II listed and falls within the Tottenham Green, Tottenham High Road Conservation Area. Though largely reconstructed following fire, the building retains the scale and form of Tottenham's late eighteenth-century development. Such development took the form of grand terraced houses that would typify later Georgian Tottenham. Along the High Road these buildings are now a rarity, though good examples survive in the Bruce Grove area. These high status structures were the first major indication of the increasingly suburban nature of Tottenham as its role as a leafy satellite of the City increased. The extensive garden plots to front and rear also provide some indication of the genteel quality of the suburb.

## **Impact**

The proposed works include extensions to the north, the south, the rear, the basement, and at roof level. These works necessitate the demolition of the existing southern extension, the only remaining historic fabric on site. The scale of extension will create an overcrowding of the significant terraced form, ultimately recasting the building into a new form of development no longer discernible for its record of an historic urban grain. The installation of an external cornice to the parapet and larger windows to the first floor of No.

401 will reinstate some features of the historic site that were lost at the time of the reconstruction, though it is not proposed to reinstate the significant former doorcase.

### **Policy**

The Government's National Planning Policy Framework 2012 (NPPF) includes the conservation of heritage assets as a core principle underpinning sustainable development. Section 12 deals with the conservation and enhancement of the historic environment through such development, and contains policies of relevance to this case.

Paragraph 126 discusses the importance of sustaining and enhancing the significance of heritage assets, as does paragraph 137 which specifically directs that local planning authorities 'should look for opportunities for new development within Conservation Areas to enhance or better reveal their significance'.

### **Historic England's Position**

Due to the recent reconstruction of 399-401 the principle of extending these buildings to a substantial degree is unlikely to cause harm to the historic environment. However, despite their recent history these buildings do retain significant elements. These primarily include the older surviving extension to the south of No. 399, and the record of high status terraced development along the High Road.

In our view the proper realisation of Paragraph 137 of the NPPF which directs councils to seek opportunities to enhance or better reveal the significance of heritage assets would see the retention of the existing southern extension, and the legibility of the buildings' terraced form enhanced.

The proposals at present would result in the demolition of the existing southern extension, thereby removing any fabric that predated the fire. It would also create broad, high, stepped extensions to the north and south that will make the existing buildings more difficult to distinguish for their terraced form.

We would advise that the existing southern extensions should be retained, and that the proposed northern extension should be redesigned so as to continue the terrace. The continuation of the terrace would allow slightly more development space to be utilised at the north end, and a more confident expression of the Conservation Area's historic development.

While the restitution of historical details such as the cornice and the earlier window configuration may provide an additional opportunity to reveal lost significance, your council should satisfy itself that this is not at the expense of design quality. Of the external elements of 399-401 High Rd now lost, the most significant detail was the original doorcase of broken pedimented form.

### **Recommendation**

We recommend the proposals undergo further alteration and review with the aim of retaining the south extension and achieving an architectural solution better representative of the historic form of development associated with this site. Your council must be satisfied that an opportunity to better reveal or enhance the significance of the conservation area is realised through this development.

**29/04/2015**

Having clarified that the existing south extension will be extended upwards but not demolished the original comments require amendment.

This approach in retaining some historic fabric is preferable to the demolition of that area, but the result renders the same impacts as observed to the north. That is, the obscuring of the terraced form. Moreover, the value of the original extension will largely be erased by developing in this fashion as it too will no longer be discernible.

## 5. LOCAL REPRESENTATIONS

5.1 The application has been publicised by way of 1 site notice and notice in the local press.

5.2 The number of representations received from neighbours, local groups etc in response to notification and publicity of the application were as follows:

No of individual responses: 1  
Objecting: 0  
Supporting: 1

5.3 The following issues were raised in representations that are material to the determination of the application and are addressed in the next section of this report:

- Support the proposal which will ensure the continuation of Tottenham Chances and all the work it does (but in improved premises).
- Happy with the proposed design which is clearly a great improvement on the present building

## 6 MATERIAL PLANNING CONSIDERATIONS

### 6.1 Impact on the Listed Building

The subject property is a Grade II listed building and as such there is a legal requirement for its protection. The Legal Position on impacts on heritage assets is as follows, and Section 66(1) of the Listed Buildings and Conservation Areas Act 1990 provides:

*“In considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses”.*

The *Barnwell Manor Wind Farm Energy Limited v East Northamptonshire District Council* case tells us that "Parliament in enacting section 66(1) did intend that the desirability of preserving listed buildings should not simply be given careful consideration by the decision-maker for the purpose of deciding whether there would be some harm, but should be given "considerable importance and weight" when the decision-maker carries out the balancing exercise."

The *Queen (on the application of The Forge Field Society) v Sevenoaks District Council* says that the duties in Sections 66 and 72 of the Listed Buildings Act do not allow a Local Planning Authority to treat the desirability of preserving listed buildings as mere material considerations to which it can simply attach such weight as it sees fit. If there was any doubt about this before the decision in *Barnwell*, it has now been firmly dispelled. When an

authority finds that a proposed development would harm a listed building it must give that harm considerable importance and weight. This does not mean that an authority's assessment of likely harm to the listed building is other than a matter for its own planning judgment. It does not mean that the weight the authority should give to harm which it considers would be limited or less than substantial must be the same as the weight it might give to harm which would be substantial. But it is to recognise, as the Court of Appeal emphasized in *Barnwell*, that a finding of harm to a listed building gives rise to a strong presumption against planning permission being granted. The presumption is a statutory one, but it is not irrebuttable. It can be outweighed by material considerations powerful enough to do so. An authority can only properly strike the balance between harm to a heritage asset on the one hand and planning benefits on the other if it is conscious of the statutory presumption in favour of preservation and if it demonstrably applies that presumption to the proposal it is considering.

In short, there is a requirement that the impact of the proposal on the heritage assets be very carefully considered, that is to say that any harm or benefit to each element needs to be assessed individually in order to assess and come to a conclusion on the overall heritage position. If the overall heritage assessment concludes that the proposal is harmful then that should be given "considerable importance and weight" in the final balancing exercise having regard to other material considerations which would need to carry greater weight in order to prevail.

London Plan Policy 7.8 requires that development affecting heritage assets and their settings to conserve their significance by being sympathetic to their form, scale and architectural detail. Haringey Local Plan Policy SP12 requires the conservation of the historic significance of Haringey's heritage assets. Saved Haringey Unitary Development Plan Policy CSV4 requires that alterations or extensions to listed buildings are necessary and are not detrimental to the architectural and historical integrity and detailing of a listed building's interior and exterior, relate sensitively to the original building; and do not adversely affect the setting of a listed building.

In considering the significance of the site, The Historic England note that although largely reconstructed following fire, the building retains the scale and form of Tottenham's late eighteenth-century development. Such development took the form of grand terraced houses that would typify later Georgian Tottenham. Along the High Road these buildings are now a rarity, though good examples survive in the Bruce Grove area. These high status structures were the first major indication of the increasingly suburban nature of Tottenham as its role as a leafy satellite of the City increased. The extensive garden plots to front and rear also provide some indication of the genteel quality of the suburb. The Council's Conservation Officer notes that the part of the southern extension that survived the fire is perhaps the only remnant of the original building and therefore significant. During the rebuild the original windows were not replicated and the decorative entrance door case was lost. As such, the main building does not contain any historic features. Any new development should, therefore, preserve the scale and form of the existing building and retain the southern extension.

The scheme proposes to convert the existing building to residential flats with a substantial extension to its rear. Additional floors are proposed to the main building and to the retained southern extension along with a three storey extension to the north. The scheme also proposes to reinstate the original style of the windows now lost along with the entrance door case. The northern extension is designed to appear similar to the southern extension, thus re-establishing symmetry that would have been part of the original Georgian building.

Historic England have considered the proposal and consider that the scale of extension will create an overcrowding of the significant terraced form, ultimately recasting the building into a new form of development no longer discernible for its record of an historic urban grain. The installation of an external cornice to the parapet and larger windows to the first floor of No. 401 will reinstate some features of the historic site that were lost at the time of the reconstruction, though it is not proposed to reinstate the significant former doorcase. This approach in retaining some historic fabric is preferable to the demolition of that area, but the result renders the same impacts as observed to the north. That is, the obscuring of the terraced form. Moreover, the value of the original extension will largely be erased by developing in this fashion as it too will no longer be discernible.

Paragraph 134 of the National Planning Policy Framework states that 'Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including securing its optimum viable use.' The applicant has submitted a Design and Heritage Statement explaining how the proposal would preserve or enhance the character and appearance of the conservation area as per NPPF requirements.

In context of the Council's statutory duty in respect of heritage assets it is considered that the scale of the extensions is such that they render the scale and form of the existing pair illegible including that of the retained southern extension. The extension would have an overbearing impact on the listed building and would not be considered subordinate and ancillary in nature. As such it would cause significant harm to its character and appearance. In terms of design, the proposed extensions are not considered to be of high quality that would enhance the appearance of the listed building. Whilst there is some heritage benefit with regards to the reinstatement of some of the earlier features, this would not outweigh the substantial harm caused by the scale and overbearing nature of the proposed extensions.

In context of the recent case on Barnwell Manor, the discharge of duty to ensure that development should preserve or enhance the character of heritage assets has been considered. The proposed scheme, by virtue of its overall size and nature would not preserve or enhance the listed building and would cause significant harm to it. Whilst the reinstatement of some of the historic features has some heritage benefit, this would not outweigh the substantial harm caused by the proposal, as per the NPPF. As such, the scheme is unacceptable under current legislation and policies.

## **6.2 Conclusions**

The proposed scheme, by virtue of its overall size and nature would not preserve or enhance the listed building, the proposed extension detracts from the architectural character and setting of the listed building, would undermine its special architectural and historic interest and would cause significant harm to it. Whilst the reinstatement of some of the historic features has some heritage benefit, this would not outweigh the substantial harm caused by the proposal. contrary to Policy SP12 of the Haringey Local Plan 2013, Saved Policy CSV4 of the Haringey Unitary Development Plan 2006 and Policy 7.8 of the London Plan 2011.



All other relevant policies and considerations, including equalities, have been taken into account. Planning permission should be granted for the reasons set out above. The details of the decision are set out in the RECOMMENDATION

## **8. RECOMMENDATION**

### **REFUSE CONSENT**

Registered No. HGY/2015/0774

Applicant's drawing No.(s) 311-01 Rev A, 02, 03, 04, 05, 06, 08, 09, 10, 11 Rev O , 12 Rev T, 13 Rev T, 14 Rev T, 15 Rev T, 16 Rev V, 18 Rev R, 19 Rev R, 20 Rev K, 21 Rev H, 22 Rev K, 23 Rev K, 24 Rev L, 25 Rev A, 26 Rev A, 30, 31, 50 & 51 and Statement of Heritage Significance dated 21st January 2015

For the following reason(s):

The proposal, by virtue of its overall size, scale, bulk and design would not preserve or enhance the listed building and would detract from the architectural character and setting of the listed building, would undermine its special architectural and historic interest and would cause significant harm to it. Whilst the reinstatement of some of the historic features has some heritage benefit, this would not outweigh the substantial harm caused by the proposal. As such, the proposal is contrary to Policy SP12 of the Haringey Local Plan 2013, Saved Policy CSV4 of the Haringey Unitary Development Plan 2006 and Policy 7.8 of the London Plan 2011.

Mr David Alton  
ADA Architects  
129 Kings Road  
Halstead  
Essex  
C09 1HJ

**On behalf of**  
Tottenham War Services  
399 High Road  
London  
N17 6QN

Planning Application Reference No. **HGY/2015/0774**

**TOWN AND COUNTRY PLANNING ACT 1990**  
**PLANNING (LISTED BUILDING AND CONSERVATION AREAS) ACT 1990**

**NOTICE OF REFUSAL OF LISTED BUILDING CONSENT**

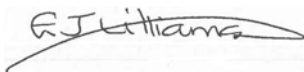
Location: **399 - 401 High Road N17**

Proposal: **Listed Building Consent for refurbishment of existing premises and roof extension and extension at rear to provide 17 flats.**

In pursuance of their powers under the above Acts, Haringey Council as Local Planning Authority hereby **REFUSE CONSENT** for the above development in accordance with the application received on 20/03/2015 and drawing numbers 311-01 Rev A, 02, 03, 04, 05, 06, 08, 09, 10, 11 Rev O , 12 Rev T, 13 Rev T, 14 Rev T, 15 Rev T, 16 Rev V, 18 Rev R, 19 Rev R, 20 Rev K, 21 Rev H, 22 Rev K, 23 Rev K, 24 Rev L, 25 Rev A, 26 Rev A, 30, 31, 50 & 51 and Statement of Heritage Significance dated 21st January 2015

SEE REASONS FOR REFUSAL ATTACHED

**15/05/2015**



**Emma Williamson**  
**Head of Development Management**  
**Planning Service**

NOTE: You can find advice in regard to your rights of appeal at:  
[www.planningportal.gov.uk/planning/appeals/guidance/guidancecontent](http://www.planningportal.gov.uk/planning/appeals/guidance/guidancecontent)

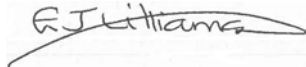
## **SCHEDULE OF REASONS FOR REFUSAL FOR DECISION REFERENCE No. HGY/2015/0774**

The above application has been refused for the following reason:

1. The proposal, by virtue of its overall size, scale, bulk and design would not preserve or enhance the listed building and would detract from the architectural character and setting of the listed building, would undermine its special architectural and historic interest and would cause significant harm to it. Whilst the reinstatement of some of the historic features has some heritage benefit, this would not outweigh the substantial harm caused by the proposal. As such, the proposal is contrary to Policy SP12 of the Haringey Local Plan 2013, Saved Policy CSV4 of the Haringey Unitary Development Plan 2006 and Policy 7.8 of the London Plan 2011.

INFORMATIVE: In dealing with this application the Council has implemented the requirement in the National Planning Policy Framework to work with the applicant in a positive and proactive way. We have made available detailed advice in the form of our development plan comprising the London Plan 2011, the Haringey Local Plan 2013 and the saved policies of the Haringey Unitary Development Plan 2006 along with relevant SPD/SPG documents, in order to ensure that the applicant has been given every opportunity to submit an application which is likely to be considered favourably. In addition, where appropriate, further guidance was offered to the applicant during the consideration of the application.

15/05/2015



**Emma Williamson**  
**Head of Development Management**  
**Planning Service**